

## IN THE CLAIMS:

Please amend Claims 1-18 and 20-26 as follows and add new claims 27-60 as follows.

1. \ (Amended) A compound of formula I

$$Ar \xrightarrow{S} \xrightarrow{R_1} \xrightarrow{R_2} \xrightarrow{R_3}$$

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or a pharmaceutically-acceptable salt or prodrug thereof,

where  $R_1$ ,  $R_2$ ,  $R_3$ ,  $R_4$ , and  $R_5$  are each independently selected from

- a. hydrogen,
- b. halogen,
- c. alkyl,
- d. haloalkyl,
- e. alkoxy,
- f. cyano,
- g. nitro,
- h. carboxaldehyde,
- i. heterocyclylsulfanyl,
- j. "cis-cinnamide", and
- k. "trans-cinnamide",

where "cis-cinnamide" and "trans-cinnamide" are defined as

"cis-cinnamide"

"trans-cinnamide",

where R<sub>8</sub> and R<sub>9</sub> are each independently selected from

- a. hydrogen,
- b. alkyl,
- c\ carboxy alkyl,
- d. \ monoalkylaminocarbonyl alkyl, and
- e. \ dialkylaminocarbonyl alkyl,

and R<sub>10</sub> and R<sub>11</sub> are each independently selected from

- a. hydrogen,
- b. alkyl
- c. cycloalkyl,
- d. alkoxycarbonylalkyl,
- e. hydroxyalkyl,
- f. substituted aryl,
- g. unsubstituted heterocyclyl,
- h. unsubstituted heterocyclylalkyl,
- i. heterocyclylamino,
- j. substituted heterocyclyl,
- k. substituted heterocyalylalkyl,
- l. unsubstituted aryl,
- m. arylalkyl,
- n. carboxyalkyl, and
- o. alkoxyalkyl,

or  $R_{10}$  and  $R_{11}$  are taken together with N to form an unsubstituted heterocyclyl or substituted heterocyclyl group, substituted by one or more than one substituent, each substitutent independently selected from

- 1) alkyl
- 2) alkoxy,
- 3) alkoxyalkyl,
- 4) cycloalkyl,



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- 5) aryl,
- 6) \ heterocyclyl,
- 7) \ heterocyclylcarbonyl,
- 8) \ heterocyclylalkylaminocarbonyl,
- 9) \hydroxy,
- 10) hydroxyalkyl,
- 11) hydroxyalkoxyalkyl,
- 12) carboxy,
- 13) carboxyalkyl,
- 14) carboxycarbonyl,
- 15) carboxaldehyde,
- 16) alkoxycarbonyl,
- 17) arylalkoxycarbonyl,
- 18) aminoalkyl,
- 19) aminoalkanoyl,
- 20) carboxamido,
- 21) alkoxycarbonylalky
- 22) carboxamidoalkyl,
- 23) cyano,
- 24) unsubstituted tetrazolyl,
- 25) substituted tetrazolyl,
- 26) alkanoyl,
- 27) hydroxyalkanoyl,
- 28) alkanoyloxy,
- 29) alkanoylamino,
- 30) alkanoyloxyalkyl,
- 31) alkanoylaminoalkyl,
- 32) sulfonate,
- 33) alkylsulfonyl,
- 34) alkylsulfonylaminocarbonyl,
- 35) arylsulfonylaminocarbonyl,

- 36) heterocyclylsulfonylaminocarbonyl,
- 37) alkenoxycarbonyl,
- 38) alkoxycarbonylalkylaminocarbonyl,
- (39) aryl(carboxy)alkylaminocarbonyl,
- 40) carboxyalkylaminocarbonyl,
- 41) heterocyclylalkyl,
- 42) \ hydroxyalkylaminocarbonyl,
- 43) \hydroxyaminocarbonyl,
- 44) hydroxy(carboxy)alkylaminocarbonyl,
- 45) hydroxy(carboxy)alkylcarbonyl, and
- 46) sulfoalkylaminocarbonyl,

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and where Ar is an unsubstituted aryl or unsubstituted heteroaryl group, or a substituted aryl or substituted heteroaryl group, substituted by one or more than one substituent, each substituent independently selected from

- a. halogen,
- b. alkyl,
- c. aryl,
- d. haloalkyl,
- e. hydroxy,
- f. alkoxy,
- g. alkoxyalkyl,
- h. alkoxycarbonyl,
- i. alkoxyalkoxy,
- j. hydroxyalkyl,
- k. aminoalkyl,
- l. aminocarbonyl,
- m. alkyl(alkoxycarbonylalkyl)aminoalkyl,
- n. unsubstituted heterocyclyl,
- o. substituted heterocyclyl,

- p. unsubstituted heterocyclylalkyl,
- q. substituted heterocyclylalkyl,
- r.\ carboxaldehyde,
- s. \ carboxaldehyde hydrazone,
- t. \ carboxamide,
- u. alkoxycarbonylalkyl,
- v. carboxy,
- w. carboxyalkyl,
- x. carboxyalkoxy,
- y. carbox thioalkoxy,
- z. carboxycycloalkoxy,
- aa. alkylsulfanyl,
- bb. hydroxycarbonylalkyl (carboxyalkyl),
- cc. hydroxyalkylaminocarbonyl,
- dd. cyano,
- ee. amino,
- ff. heterocyclylalkylamino,
- gg. carboxyalkylamino,
- hh. carboxyalkenyl,
- ii. alkoxycarbonylalkenyl
- jj. heterocyclylalkylaminocarbonyl, and
- kk. "trans-cinnamide",

## subject to the provisos that:

- i) one or more than one of  $R_1$  or  $R_3$  is a "cis-cinnamide" or a "transcinnamide", as defined above, and
- ii) when R3 is a "cis-cinnamide" or a "trans-cinnamide," and  $R_8$  is alkyl, then
  - (A) one or more than one of  $R_1$ ,  $R_2$ ,  $R_4$ , and  $R_5$  is other than hydrogen when Ar is an unsubstituted aryl group, or



- (B) Ar is a substituted aryl group, when all of  $R_1$ ,  $R_2$ ,  $R_4$ , and  $R_5$  are hydrogen.
- 2. (Amended) A compound according to Claim 1 where  $R_1$  is a "cis-cinnamide" or a "trans<sub>7</sub>cinnamide", and  $R_3$  is hydrogen.
- 3. (Amended) A compound according to Claim 1 where  $R_3$  is a "cis-cinnamide" or a "trans-cinnamide", and  $R_1$  is hydrogen.
- 4. (Amended) A compound according to Claim 1 where  $R_3$  is a "cis-cinnamide" or a "trans-cinnamide", and one or more than one of  $R_1$ ,  $R_8$ , and  $R_9$  are each hydrogen.
- 5. (Amended) A compound according to Claim 4 where R<sub>3</sub> is a "cis-cinnamide".
- 6. (Amended) A compound according to Claim 4 where R<sub>3</sub> is a "trans-cinnamide".
- 7. (Amended) A compound according to Claim 1 where  $R_3$  is a "cis-cinnamide" or a "trans-cinnamide",  $R_1$ ,  $R_2$ , and  $R_4$  are each independently selected from hydrogen and alkyl; and  $R_5$  is halogen, haloglkyl, or nitro.
- 8. (Amended) A compound according to Claim 4 where Ar is a substituted aryl or substituted heteroaryl.
- 9. (Amended) A compound according to Claim 4 where R<sub>10</sub> and R<sub>11</sub> are each independently selected from hydrogen, alkyl, cycloalkyl, alkoxycarbonylalkyl, hydroxyalkyl, and heterocyclylalkyl.
- 10. (Amended) A compound according to Claim 4 where  $R_{10}$  and  $R_{11}$  are taken together with N to form an unsubstituted heterocyclyl or substituted heterocyclyl group.
- 11. (Amended) A compound according to Claim 8 where Ar is a substituted aryl or substituted heteroaryl group selected from phenyl, 1,3-benzimidazol-2-one, 1,4-benzodioxane, 1,3-benzodioxole, 1-benzopyr-2-en-4-one, indole, isatin, 1,3-quinazolin-4-one, and quinoline.
- 12. (Amended) A compound according to Claim\l selected from: (2,4-Dichlorophenyl)[2-(E-((6-hydroxyhexylamino)carbonyl)ethenyl)phenyl] sulfide; (2,4-Dichlorophenyl)[2-(E-((3-(1-imidazolyl)propylamino)carbonyl)ethenyl)phenyl]



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sulfide;

- (2,4-Dichlorophenyl)[2-chloro-4-(*E*-((2-hydroxyethylamino)carbonyl)ethenyl)phenyl] sulfide;
- (2,4-Dichlorophenyl)[2-chloro-4-(*E*-((6-hydroxyhexylamino)carbonyl)ethenyl)phenyl] sulfide;
- (2,4-Dichlorophenyl)[2-chloro-4-(*E*-((bis-(2-hydroxyethyl)amino)carbonyl)ethenyl) phenyl] sulfide;
- (2,4-Dichlorophenyl)[2-chloro-4-(*E*-((3-(2-oxopyrrolidin-1-yl)propylamino)carbonyl) ethenyl)phenyl] sulfide;
- (2,4-Dichlorophenyl)[2-chloro-4-(E-((1-morpholinyl)carbonyl)ethenyl)phenyl] sulfide;
- (2,4-Dichlorophenyl)[2-chloro-4-(*E*-((4-methylpiperazin-1-yl)carbonyl)ethenyl)phenyl] sulfide;
- (2,4-Dichlorophenyl)[2-chloro-4-(*E*-((4-acetylpiperazin-1-yl)carbonyl)ethenyl)phenyl] sulfide;
- (2,4-Dichlorophenyl)[2-chloro-4-(*E*-((4-(2-pyridyl)piperazin-1-yl)carbonyl) ethenyl)phenyl] sulfide;
- (2-(Hydroxymethyl)phenyl)[2-chloro-4-(*E*-((1-morpholinyl)carbonyl) ethenyl)phenyl] sulfide;
- (2-Bromophenyl)[2-chloro-4-(E-((1-morpholinyl)carbonyl) ethenyl)phenyl] sulfide;
- (2,4-Dichlorophenyl)[2-chloro-4-(E-((4<sub>7</sub>(2-hydroxyethyl)piperazin-1-yl)carbonyl) ethenyl)phenyl] sulfide;
- (2,4-Dichlorophenyl)[2-chloro-4-(*E*-((4-(2-hydroxyethoxyethyl)piperazin-1-yl)carbonyl) ethenyl)phenyl] sulfide;
- (2-Bromophenyl)[2-chloro-4-(*E*-((3-(hydroxymethyl)piperidin-1-yl)carbonyl) ethenyl)phenyl] sulfide;
- (2-Bromophenyl)[2-chloro-4-(E-((2-(hydroxymethyl)piperidin-1-yl)carbonyl) ethenyl)phenyl] sulfide;
- (2-Bromophenyl)[2-chloro-4-(E-((3-acetamidopyrrolidin-1-yl)carbonyl)ethenyl)phenyl] sulfide;
- (2-Bromophenyl)[2-chloro-4-(E-((4-hydroxypiperidin-1\yl)carbonyl)ethenyl)phenyl] sulfide;

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- (2-Bromophenyl)[2-chloro-4-(E-((piperidin-1-yl)carbonyl) ethenyl)phenyl] sulfide;
- (2,4-Dichlorophenyl)[2-chloro-4-(*E*-((3-carboxypiperidin-1-yl)carbonyl)ethenyl)phenyl] sulfide;
- (2,4-Dichlorophenyl)[2-chloro-4-(*E*-((4-carboxypiperidin-1-yl)carbonyl)ethenyl)phenyl] sulfide;
- (2-Bromophenyl)[2-chloro-4-(*E*-((4-acetylhomopiperazin-1-yl)carbonyl)ethenyl)phenyl] sulfide;
- (2-Bromophenyl)[2-chloro-4-(E-((thiomorpholin-1-yl)carbonyl)ethenyl)phenyl] sulfide;
- (2-Bromophenyl)[2-chloro-4-(*E*-((4-(2-oxo-2,3-dihydro-1H-benzimidazol-1-yl)piperidin-1-yl)carbonyl)ethenyl)phenyl] sulfide;
- (2-Bromophenyl)[2-chloro-4-(*E*-((2-tetrahydroisoquinolinyl)carbonyl)ethenyl)phenyl] sulfide;
- (2-Methylphenyl)[2-trifluoromethyl-4-(*E*-((4-acetylpiperazin-1-yl)carbonyl) ethenyl)phenyl] sulfide;
- (2-Methylphenyl)[2-trifluoromethyl-4-(E-((1-morpholinyl)carbonyl)ethenyl)phenyl] sulfide;
- (2-Methylphenyl)[2-trifluoromethyl-4-(E-((2-(1-morpholinyl)ethylamino)carbonyl) ethenyl)phenyl] sulfide;
- (2-Methylphenyl)[2-trifluoromethyl-4-(*E*-((4-phenylpiperazin-1-yl)carbonyl) ethenyl)phenyl] sulfide;
- (2-Methylphenyl)[2-trifluoromethyl-4-(*E*-((3-(2-oxopyrrolidin-1-yl)propylamino) carbonyl) ethenyl)phenyl] sulfide;
- (2-Methylphenyl)[2-trifluoromethyl-4-(*E*-((cyclopropylamino)carbonyl)ethenyl) phenyl] sulfide;
- $(2,4-Dichlorophenyl)[2-nitro-4-(E-((4-acetylpiperazin-<math>\dot{l}_{-}yl)carbonyl)ethenyl)$  sulfide;
- (2,4-Dichlorophenyl)[2-nitro-4-(*E*-((3-(2-oxopyrrolidin-1-yl))propylamino)carbonyl) ethenyl)phenyl] sulfide;
- (2,3-Dichlorophenyl)[2-nitro-4-(*E*-((4-acetylpiperazin-1-yl)carbonyl)ethenyl)phenyl] sulfide;
- (4-Bromophenyl)[2-nitro-4-(E-((4-acetylpiperazin-1-yl)carbonyl)ethenyl)phenyl]

sulfide;

- (4\)Methylphenyl)[2-nitro-4-(E-((4-acetylpiperazin-1-yl)carbonyl)ethenyl)phenyl] sulfide;
- (2,4-Dichlorophenyl)[2-nitro-4-(*E*-((4-(*tert*-butoxycarbonyl)piperazin-1-yl)carbonyl) ethenyl)phenyl] sulfide;
- (2,4-Dichlorophenyl)[2-nitro-4-(*E*-((4-(2-furoylcarbonyl)piperazin-1-yl)carbonyl) ethenyl] sulfide;
- (2,4-Dichlorophenyl)[2-nitro-4-(E-((4-(methanesulfonyl)piperazin-1-yl)carbonyl) ethenyl)phenyl] sulfide;
- (2,4-Dichlorophenyl)[2-nitro-4-(E-((4-(diethylaminocarbonylmethyl)piperazin-1-yl)carbonyl) ethenyl)phenyl] sulfide;
- (2,4-Dichlorophenyl)[2\nitro-4-(E-((4-(diethylaminocarbonyl)piperazin-1-yl)carbonyl) ethenyl)phenyl] sulfide;
- (2,4-Dichlorophenyl)[2-nitro-4-(E-((4-(tert-butoxycarbonylmethyl)piperazin-1-yl)carbonyl) ethenyl)phenyl] sulfide;
- (2,4-Dichlorophenyl)[2-nitro-4-(*E*-((4-(carboxycarbonyl)piperazin-1-yl)carbonyl) ethenyl)phenyl] sulfide;
- (2,4-Dichlorophenyl)[2-nitro-4-(*E*-((4-(carboxymethyl)piperazin-1-yl)carbonyl) ethenyl)phenyl] sulfide;
- (2-Methylphenyl)[2-nitro-4-(*E*-((4-acetylpiperazin-1-yl)carbonyl)ethenyl)phenyl] sulfide;
- (2-Chlorophenyl)[2-nitro-4-(*E*-((4-acetylpiperazin-1-yl)carbonyl)ethenyl)phenyl] sulfide;
- (2-Aminophenyl)[2-nitro-4-(*E*-((4-acetylpiperazin-1-yl)carbonyl)ethenyl)phenyl] sulfide;
- (2-Hydroxymethylphenyl)[2-nitro-4-(*E*-((4-acetylpiperazin-1-yl)carbonyl)ethenyl) phenyl]sulfide;
- (2-Ethylphenyl)[2-nitro-4-(*E*-((4-acetylpiperazin-1-yl)carbonyl)ethenyl)phenyl] sulfide;
- (2-iso-Propylphenyl)[2-nitro-4-(E-((4-acetylpiperazin-1-yl)carbonyl)ethenyl)phenyl] sulfide;

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- (2-tert-Butylphenyl)[2-nitro-4-(E-((4-acetylpiperazin-1-yl)carbonyl)ethenyl)phenyl] sulfide;
- (2-Chlorophenyl)[2-chloro-4-(*E*-((4-acetylpiperazin-1-yl)carbonyl))2-propenyl)phenyl] sulfide;
- (2-(1-Morpholinylmethyl)phenyl)[2-chloro-4-(*E*-((1-morpholinyl)carbonyl) ethenyl) phenyl] sulfide;
- (2-(4-(1,3-Benzodioxolyl-5-methyl)piperazin-1-ylmethyl)phenyl)[2-chloro-4-(E-((1-morpholinyl)carbonyl) ethenyl)phenyl] sulfide;
- (2-(4-(*iso*-Propylaminocarbonylmethyl)piperazin-1-ylmethyl)phenyl)[2-chloro-4-(*E*-((1-morpholinyl)carbonyl) ethenyl)phenyl] sulfide;
- (2-((N-Ethoxycarbonylmethyl-N-methyl)aminomethyl)phenyl)[2-chloro-4-(E-((1-morpholinyl)carbonyl) ethenyl)phenyl] sulfide;
- (2-Formylphenyl)[2-chloro-4](E-((1-morpholinyl)carbonyl)ethenyl)phenyl] sulfide;
- (2-(4-Formylpiperazin-1-ylmethyl)phenyl)[2-chloro-4-(*E*-((1-morpholinyl)carbonyl) ethenyl)phenyl] sulfide;
- (2-(E-((1-Morpholinyl)carbonyl)ethenyl)phenyl)[2-chloro-4-(E-((1-morpholinyl)carbonyl)ethenyl)phenyl] sulfide;
- (2-Formylphenyl)[2-nitro-4-(*E*-((4-acetylpiperazin-1-yl)carbonyl)ethenyl)phenyl] sulfide;
- (2-Formylphenyl)[2-chloro-4-(*E*-((1-morpholinyl)carbonyl)ethenyl)phenyl] sulfide, N,N-dimethyl hydrazone;
- (2-((3-(1-Morpholinyl)propyl)-1-amino)phenyl) 2-chloro-4-(E-((1-morpholinyl)carbonyl) ethenyl)phenyl] sulfide;
- (2,4-Dichlorophenyl)[2-bromo-4-(*E*-((3-(2-oxopyrrolidin-1-yl)propylamino)carbonyl) ethenyl)phenyl] sulfide;
- (2,4-Dichlorophenyl)[2-formyl-4-(E-((1-morpholinyl)carbonyl)ethenyl)phenyl] sulfide;
- (2-Chloro-6-formylphenyl)[2-chloro-4-(*E*-((4-acetylpiperazin-1-yl)carbonyl)ethenyl) phenyl] sulfide;
- (2-Cyanophenyl)[2-chloro-4-(*E*-((4-acetylpiperazin-1-yl)carbonyl) ethenyl) phenyl] sulfide;
- (2-Isopropylphenyl)[2-cyano-4-(E-((morpholin-1-yl)carbonyl)

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ethenyl) phenyll sulfide;
(2\Bromophenyl)[2-nitro-4-(E-((4-acetylpiperazin-1-yl)carbonyl)]
ethenyl) phenyl] sulfide;
(2-(Pyrholidin-1-yl)phenyl)[2-chloro-4-(E-((morpholin-1-yl)carbonyl)
ethenyl) phenyl] sulfide;
(2-Methoxyphenyl)-[2-chloro-4-(E-[(morpholin-1-yl)carbonyl]ethenyl)phenyl]sulfide;
(2-Isopropylphenyl)[2-nitro-4-(E-((3-carbomethoxypiperazin-1-yl)carbonyl)]
ethenyl) phenyll sulfide;
(2-Methylphenyl)[2-nitro-4-(E-((3-carboxamido-4-carbobenzoxypiperazin-1-
yl)carbonyl)ethenyl) phenyl] sulfide;
(2-Isopropylphenyl)[2-hitro-4-(E-((2-carbomethoxy-4-tert-butoxycarbonylpiperazin-1-
vl)carbonyl)ethenyl) phenyl] sulfide;
(2-Isopropylphenyl)[2-nitr\u00e0-4-(E-((2-carboxy-4-tert-butoxycarbonylpiperazin-1-
yl)carbonyl)ethenyl) phenyl] sulfide;
(2-Isopropylphenyl)[2-trifluoromethyl-4-(E-((4-acetylpiperazin-1-yl)carbonyl)
ethenyl) phenyl] sulfide;
(2-Isopropylphenyl)[2-trifluoromethyl-4-(E-((morpholin -1-yl)carbonyl)
ethenyl) phenyll sulfide:
(2-Isopropylphenyl)[2-trifluoromethyl-4-(E-((3-(2-oxopyrrolidin-1-yl)prop-1-
ylamino)carbonyl) ethenyl)phenyl]sulfide;
(2-Isopropylphenyl)[2-trifluoromethyl-4-(È-((cyclobutylamino)carbonyl)
ethenyl) phenyl] sulfide;
(2-Isopropylphenyl)[2-trifluoromethyl-4-(E-((dyclopentylamino)carbonyl)
ethenyl) phenyl] sulfide;
(2-Isopropylphenyl)[2-trifluoromethyl-4-(E-((5-hydroxypent-1-ylamino)carbonyl)
ethenyl) phenyl] sulfide;
(2-Isopropylphenyl)[2-nitro-4-(E-((3-carbomethoxy-4\acetylpiperazin-1-
yl)carbonyl)ethenyl) phenyl] sulfide;
(2-Biphenyl)[2-chloro-4-(E-((morpholin-1-yl)carbonyl)ethenyl) phenyl] sulfide;
(3,4-Dimethylphenyl)[2-nitro-4-(E-((4-acetylpiperazin-1-
yl)carbonyl)ethenyl)phenyl]sulfide;
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(2_{\overline{\lambda}}Bromophenyl)[2-trifluoromethyl-4-(E-((4-acetylpiperazin-1-yl)carbonyl)]
ethenyl) phenyll sulfide;
(5-Indolyl)[2-chloro-4-(E-((4-acetylpiperazin-1-yl)carbonyl)]
ethenyl) phenyl] sulfide;
(5-Benzodioxolyl)[2-chloro-4-(E-((4-acetylpiperazin-1-yl)carbonyl)]
ethenyl) phenyl] sulfide;
(2-Isopropylphenyl)[2-nitro-4-(E-((2-carbomethoxypiperazin-1-yl)carbonyl)ethenyl)
phenyl] sulfide;
(2,3-Dimethoxyphenyl)-[2-chloro-4-(E-[(morpholin-1-yl)carbonyl]ethenyl)phenyl]
sulfide;
(2-Fluorophenyl)[2-nitro-4-(E-((4-acetylpiperazin-1-yl)carbonyl)ethenyl)phenyl]sulfide;
(2-Bromophenyl)[2-trifluoromethyl-4-(E-((4-(tert-butoxycarbonyl)piperazin-1-
yl)carbonyl)ethenyl) phenyl] sulfide;
(2-(Pyrrolidin-1-yl)phenyl)[2\trifluoromethyl-4-(E-((4-(tert-butoxycarbonyl)piperazin-1-
yl)carbonyl)ethenyl) phenyl] sulfide;
(3-Carboxamidophenyl)[2-nitro-4](E-((4-acetylpiperazin-1-yl)carbonyl)
ethenyl) phenyl] sulfide;
(3-(Hydroxymethyl)phenyl)[2-nitro-4-(E-((4-acetylpiperazin-1-yl)carbonyl)]
ethenyl) phenyl] sulfide;
Phenyl[2-trifluoromethyl-4-(E-((4-(tert-butoxycarbonyl)piperazin-1-yl)carbonyl)ethenyl)
phenyl] sulfide;
(2-Isopropylphenyl)[2-trifluoromethyl-4-(E-((2-carbomethoxy-4-(tert-
butoxycarbonyl)piperazin-1-yl)carbonyl)ethenyl) phenyl] sulfide;
(2-Isopropylphenyl)[2-nitro-4-(E-((3-(pyridine-4-methylaminocarbonyl)-4-tert-
butoxycarbonylpiperazin-1-yl)carbonyl)ethenyl) phenyl] sulfide;
(2-Ethoxyphenyl)-[2-chloro-4-(E-[(morpholin-1-yl)carbonyl]ethenyl)phenyl]sulfide;
(2-Methoxyphenyl)[2-nitro-4-(E-((4-acetylpiperazin-1-
yl)carbonyl)ethenyl)phenyl]sulfide;
(2-(Azetidin-1-yl)phenyl)[2-trifluoromethyl-4-(E-((4-(tert-butoxycarbonyl)piperazin-1-
yl)carbonyl)ethenyl) phenyll sulfide;
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(2-(Piperidin-1-yl)phenyl)[2-trifluoromethyl-4-(E-((4-(tert-butoxycarbonyl)piperazin-1-yl)carbonyl)ethenyl) phenyl] sulfide;
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- (3-Chloro-2-formylphenyl)[2-chloro-4-(*E*-((4-acetylpiperazin-1-yl)carbonyl) ethenyl) phenyl] sulfide;
- (2-Trifluoromethylphenyl)[2-trifluoromethyl-4-(*E*-((4-acetylpiperazin-1-yl)carbonyl) ethenyl) phenyl sulfide;
- (3-Bromophenyl)[2-trifluoromethyl-4-(*E*-((4-acetylpiperazin-1-yl)carbonyl) ethenyl) phenyl] sulfide;
- (3,5-Dimethylphenyl) 2-trifluoromethyl-4-(E-((4-acetylpiperazin-1-yl)carbonyl) ethenyl) phenyl 3 sulfide:
- (2-Isopropylphenyl)[2-nitro-4-(E-((3-dimethylaminocarbonyl-4-(pyridine-4-carbonyl)piperazin-1-yl)carbonyl)ethenyl) phenyl] sulfide;
- (2-Isopropylphenyl)[2-nitro-4-(*E*-((3-dimethylaminocarbonyl-4-carbomethoxypiperazin-1-yl)carbonyl)ethenyl) phenyl] sulfide;
- (2-Isopropylphenyl)[2-nitro-4-(*E*-((3\dimethylaminocarbonyl-4-acetylpiperazin-1-yl)carbonyl)ethenyl) phenyl] sulfide;
- (2-Isopropylphenyl)[2-nitro-4-(*E*-((3-(1-morpholinocarbonyl)-4-*tert*-butoxycarbonylpiperazin-1-yl)carbonyl)ethenyl) phenyl] sulfide;
- (2-Isopropylphenyl)[2-nitro-4-(*E*-((3-(pyridine-4-methylaminocarbonyl)piperazin-1-yl)carbonyl)ethenyl) phenyl] sulfide;
- (2-Isopropylphenyl)[2-nitro-4-(*E*-(((3-dimethylaminocarbonyl)piperazin-1-yl)carbonyl)ethenyl) phenyl] sulfide;
- (2-Isopropylphenyl)[2-nitro-4-(*E*-((3-(benzylaminocarbonyl)-4-*tert*-butoxycarbonylpiperazin-1-yl)carbonyl)ethenyl) phenyl sulfide;
- (2-Isopropylphenyl)[2-nitro-4-(*E*-((3-(dimethylaminocarbonyl)-4-*tert*-butoxycarbonylpiperazin-1-yl)carbonyl)ethenyl) phenyl] sulfide;
- (2-Bromophenyl)[2-chloro-4-(E-((3-(5*S*-hydroxymethyl-2-oxopyrrolidin-1-yl)prop-1-ylamino)carbonyl) ethenyl)phenyl]sulfide;
- (2-Bromophenyl)[2-chloro-4-(E-((3-(2-oxopyrrolidin-1-yl)prop-1-ylamino)carbonyl) ethenyl)phenyl]sulfide;

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(2-Bromophenyl)[2-chloro-4-(E-(N-methyl-N-(3-(2-oxyopyrrolidin-1-yl)prop-1-
yl)amino)carbonyl) ethenyl)phenyl]sulfide;
(2-[2-Methoxy]ethoxyphenyl)-[2-chloro-4-(E-[(morpholin-1-yl)carbonyl]ethenyl)phenyl]
sulfide;
(2-Isopropylphenyl)[2-nitro-4-(E-((3-(morpholinocarbonyl)piperazin-1-
yl)carbonyl)ethenyl) phenyl] sulfide;
(2-Isopropylphenyl)[2-nitro-4-(E-((4-tert-butoxycarbonylpiperazin-1-
yl)carbonyl)ethen\()) phenyl] sulfide;
(2-Isopropylphenyl) 2-nitro-4-(E-((4-methoxycarbonylpiperazin-1-yl)carbonyl) ethenyl)
phenyl] sulfide;
(2-Isopropylphenyl)[2-nitro-4-(E-(4-(pyridine-4-carbonyl)piperazin-1-
yl)carbonyl)ethenyl) phenyl sulfide;
(2-\text{Isopropylphenyl})[2-\text{nitro-} - \frac{1}{4}(E-((3-(\text{pyridine-}3-\text{methylaminocarbonyl})-4-\text{tert-}
butoxycarbonylpiperazin-1-yl)carbonyl)ethenyl) phenyl] sulfide;
(2-Isopropylphenyl)[2-nitro-4-(E-\((3-(pyridine-2-methylaminocarbonyl)piperazin-1-
yl)carbonyl)ethenyl) phenyl] sulfide;
(2-Isopropylphenyl)[2-nitro-4-(E-((3-(pyridine-3-methylaminocarbonyl)piperazin-1-
yl)carbonyl)ethenyl) phenyl] sulfide;
(4-Hydroxyphenyl)[2-nitro-4-(E-((4-acet\piperazin-1-1)carbonyl)ethenyl)phenyl]sulfide:
(3,5-Dichlorophenyl)[2-nitro-4-(E-((4-acetylpiperazin-1-
yl)carbonyl)ethenyl)phenyl]sulfide;
(2-Bromophenyl)[2-chloro-4-(E-((3-(5S-acetox)ymethyl-2-oxopyrrolidin-1-yl)prop-1-
ylamino)carbonyl) ethenyl)phenyl]sulfide:
(2-Bromophenyl)[2-chloro-4-(E-((3-(5S-methoxymethyl-2-oxopyrrolidin-1-yl)prop-1-
ylamino)carbonyl) ethenyl)phenyl]sulfide;
(2-Bromophenyl)[2-chloro-4-(E-((3-(4R-hydroxy-2-oxopyrrolidin-1-yl)prop-1-
ylamino)carbonyl) ethenyl)phenyl]sulfide;
Phenyl[2-nitro-4-(E-((4-acetylpiperazin-1-yl)carbonyl)ethenyl)phenyl]sulfide;
(2-Dimethylaminophenyl)[2-nitro-4-(E-((4-acetylpiperazin\1-yl)carbonyl)]
ethenyl) phenyl] sulfide;
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SUM

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(3-((2-Hydroxyethyl)aminocarbonyl)phenyl)[2-nitro-4-(E-((4-acetylpiperazin-1-yl)carbonyl)ethenyl) phenyl] sulfide;
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(3-((3-(1-Imidazolyl)propyl)aminocarbonyl)phenyl)[2-nitro-4-(E-((4-acetylpiperazin-1-yl)carbonyl)ethenyl) phenyl] sulfide;

(3-((2-(1-Morpholinyl)ethyl)aminocarbonyl)phenyl)[2-nitro-4-(E-((4-acetylpiperazin-1-yl)carbonyl)ethenyl) phenyl] sulfide;

(2-Isopropylphenyl)[2-nitro-4-(*E*-((3-hydroxymethyl-4-*tert*-butoxycarbonylpiperazin-1-yl)carbonyl)ethenyl) phenyl] sulfide;

(2-Isopropylphenyl)[2-nitro-4-(*E*-((4-formylpiperazin-1-yl)carbonyl)ethenyl) phenyl] sulfide;

(2-Isopropylphenyl)[2\nitro-4-(E-((2-hydroxymethyl-4-*tert*-butoxycarbonylpiperazin-1-yl)carbonyl)ethenyl) phenyl] sulfide;

(2-Ethoxyphenyl)-[2-chloro-4(E-[(3-ethoxycarbonylpiperidin-1-yl)carbonyl]ethenyl) phenyl]sulfide;

(3- Aminophenyl)[2-nitro-4-(\(\frac{1}{4}\)-((4-acetylpiperazin-1-yl)carbonyl)ethenyl)phenyl]sulfide;

(4-Aminophenyl)[2-nitro-4-(E-((4-acetylpiperazin-1-yl)carbonyl)ethenyl)phenyl]sulfide;

(2,4-Dimethylphenyl)[2- nitro-4-(\(\bar{E}\)-((4-acetylpiperazin-1-

yl)carbonyl)ethenyl)phenyl]sulfide;

(2,5-Dimethylphenyl)[2- nitro-4-(E-()4-acetylpiperazin-1-

yl)carbonyl)ethenyl)phenyl]sulfide;

(4-Methoxyphenyl)[2-nitro-4-(E-((4-acetylpiperazin-1-

yl)carbonyl)ethenyl)phenyl]sulfide;

(3-Chlorophenyl)[2-nitro-4-(E-((4-acetylpiperazin-1-yl)carbonyl)ethenyl)phenyl]sulfide;

(2-Chloro-4,5-diaminophenyl)[2-chloro-4-(*E*-\((4-acetylpiperazin-1-yl)carbonyl)ethenyl) phenyl] sulfide;

(3,4-Diaminophenyl)[2-chloro-4-(*E*-((4-acetylpiperazin-1-yl)carbonyl)ethenyl) phenyl]sulfide;

(6-Chloro-2-oxo-2,3-dihydro-1H-benzimidazol-5-yl)[2-chloro-4-(*E*-((4-acetylpiperazin-1-yl)carbonyl)ethenyl) phenyl] sulfide;

(1-Methylindol-7-yl)[2-chloro-4-(*E*-((4-acetylpiperazin-1-yl)carbonyl)ethenyl) phenyl] sulfide;

5 Up 1

(2-Hydroxy-4-aminophenyl)[2-chloro-4-(E-((4-acetylpiperazin-1-yl)carbonyl)ethenyl) phenyl] sulfide;

(2-Isopropylphenyl)[2-nitro-4-(*E*-((4-methylpiperazin-1-yl)carbonyl)ethenyl) phenyl] sulfide;

(2-Isopropylphenyl)[2-nitro-4-(E-((4-(pyridine-2-carbonyl)piperazin-1-

yl)carbonyl)ethenyl) phenyl] sulfide;

(2-Isopropylphenyl)[2-nitro-4-(E-((4-(pyridine-3-carbonyl)piperazin-1-

yl)carbonyl)ethenyl) phenyl] sulfide;

(2-Isopropylphenyl) 2-nitro-4-(E-((2-carbomethoxy-4-methoxycarbonylpiperazin-1-

yl)carbonyl)ethenyl) phenyl] sulfide;

(2-Isopropylphenyl)[2-nitro-4-(E-((2-carboxy-4-methoxycarbonylpiperazin-1-

yl)carbonyl)ethenyl) phenyl] sulfide;

(2-Isopropylphenyl)[2-nitro-\(\frac{1}{4}\)-(E-((3-carbomethoxy-4-methylpiperazin-1-

yl)carbonyl)ethenyl) phenyl] sulfide;

(2-Ethoxyphenyl)-[2-chloro-4-(E\[(3-carboxypiperidin-1-yl)carbonyl]ethenyl)phenyl] sulfide;

(2-Ethoxyphenyl)-[2-chloro-4-(*E*-[(2-ethoxycarbonylpiperidin-1-yl)carbonyl]ethenyl) phenyl]sulfide;

 $(2-Ethoxyphenyl)[2-trifluoromethyl-4-(E_{1}((1-(tert-butoxycarbonyl)-4-hydroxypyrrolidin-trifluoromethyl-4-(E_{1}((1-(tert-butoxycarbonyl)-4-hydroxypyrrolidin-trifluoromethyl-4-(E_{1}((1-(tert-butoxycarbonyl)-4-hydroxypyrrolidin-trifluoromethyl-4-(E_{1}((1-(tert-butoxycarbonyl)-4-hydroxypyrrolidin-trifluoromethyl-4-(E_{1}((1-(tert-butoxycarbonyl)-4-hydroxypyrrolidin-trifluoromethyl-4-(E_{1}((1-(tert-butoxycarbonyl)-4-hydroxypyrrolidin-trifluoromethyl-4-(E_{1}((1-(tert-butoxycarbonyl)-4-hydroxypyrrolidin-trifluoromethyl-4-(E_{1}((1-(tert-butoxycarbonyl)-4-hydroxypyrrolidin-trifluoromethyl-4-(E_{1}((1-(tert-butoxycarbonyl)-4-hydroxypyrrolidin-trifluoromethyl-4-(E_{1}((1-(tert-butoxycarbonyl)-4-hydroxypyrrolidin-trifluoromethyl-4-(E_{1}((1-(tert-butoxycarbonyl)-4-hydroxypyrrolidin-trifluoromethyl-4-(E_{1}((1-(tert-butoxycarbonyl)-4-hydroxypyrrolidin-trifluoromethyl-4-(E_{1}((1-(tert-butoxycarbonyl)-4-hydroxypyrrolidin-trifluoromethyl-4-(E_{1}((1-(tert-butoxycarbonyl)-4-hydroxypyrrolidin-trifluoromethyl-4-(E_{1}((1-(tert-butoxycarbonyl)-4-hydroxypyrrolidin-trifluoromethyl-4-(E_{1}((1-(tert-butoxycarbonyl)-4-hydroxypyrrolidin-trifluoromethyl-4-(E_{1}((1-(tert-butoxycarbonyl)-4-hydroxypyrrolidin-trifluoromethyl-4-(E_{1}((1-(tert-butoxycarbonyl)-4-hydroxypyrrolidin-trifluoromethyl-4-(E_{1}((1-(tert-butoxycarbonyl)-4-hydroxypyrrolidin-trifluoromethyl-4-(E_{1}((1-(tert-butoxycarbonyl)-4-hydroxypyrrolidin-trifluoromethyl-4-(E_{1}((1-(tert-butoxycarbonyl)-4-hydroxypyrrolidin-trifluoromethyl-4-(E_{1}((1-(tert-butoxycarbonyl)-4-hydroxypyrrolidin-trifluoromethyl-4-(E_{1}((1-(tert-butoxycarbonyl)-4-hydroxypyrrolidin-trifluoromethyl-4-(E_{1}((1-(tert-butoxycarbonyl)-4-hydroxypyrrolidin-trifluoromethyl-4-(E_{1}((1-(tert-butoxycarbonyl)-4-hydroxypyrrolidin-trifluoromethyl-4-(E_{1}((1-(tert-butoxycarbonyl)-4-hydroxypyrrolidin-trifluoromethyl-4-(E_{1}((1-(tert-butoxycarbonyl)-4-hydroxypyrrolidin-trifluoromethyl-4-((1-(tert-butoxycarbonyl)-4-hydroxypyrrolidin-trifluoromethyl-4-((1-(tert-butoxycarbonyl)-4-hydroxypyrrolidin-trifluo$ 

3-ylamino)carbonyl)ethenyl) phenyl] sulfide;

(2-Ethoxyphenyl)-[2-chloro-4(*E*-[(2-carboxypiperidin-1-yl)carbonyl]ethenyl)phenyl] sulfide;

(2-Ethoxyphenyl)[2-trifluoromethyl-4-(*E*-(((pyrrolidin-3-ene-1-yl)carbonyl)ethenyl) phenyl] sulfide;

(2-Ethoxyphenyl)[2-trifluoromethyl-4-(*E*-((3-(2-oxopyrrolidin-1-yl)prop-1-ylamino)carbonyl) ethenyl)phenyl]sulfide;

(2-Ethoxyphenyl)[2-trifluoromethyl-4-(*E*-((4-acetylpiperazin-1-yl)carbonyl)ethenyl) phenyl] sulfide;

(2-Ethoxyphenyl)[2-trifluoromethyl-4-(E-((4-(ethoxycarbonyl)piperazin-1-yl)carbonyl)ethenyl) phenyl] sulfide;

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(\lambda - Ethoxyphenyl)[2-trifluoromethyl-4-(E-((4-(2-furylcarbonyl)piperazin-1-
yl)carbonyl)ethenyl) phenyl] sulfide;
(2-Ethoxyphenyl)-[2-chloro-4-(E-[(3-ethoxycarbonylpiperidin-1-yl)carbonyl]ethenyl)
phenyl\sulfide;
(2-Ethox) phenyl)-[2-chloro-4-(E-[(4-carboxypiperidin-1-yl)carbonyl] ethenyl) phenyl]
sulfide;
(Benzodioxan-6-yl)[2-chloro-4-(E-((4-acetylpiperazin-1-yl)carbonyl)ethenyl) phenyl]
sulfide;
(2-Isopropylphenyl)[2-nitro-4-(E-((4-ethoxycarbonylpiperazin-1-yl)carbonyl)ethenyl)
phenyl] sulfide;
(2-Isopropylphenyl)[2-nitro-4-(E-((4-isopropoxycarbonylpiperazin-1-
yl)carbonyl)ethenyl) phenyl] sulfide;
(2-Isopropylphenyl)[2-nitro-4-(E-((4-isobutoxycarbonylpiperazin-1-yl)carbonyl)ethenyl)
phenyl] sulfide;
(2-\text{Isopropylphenyl})[2-\text{nitro-}\dot{4}_{\tau}(E-((4-((1-\text{propen-}2-\text{oxy})\text{carbonyl})\text{piperazin-}1-
yl)carbonyl)ethenyl) phenyl] sulfide;
(2-Isopropylphenyl)[2-nitro-4-(E\((4-propionylpiperazin-1-yl)carbonyl)ethenyl) phenyl]
sulfide;
(2-Isopropylphenyl)[2-nitro-4-(E-((4-carboxamidopiperazin-1-yl)carbonyl)ethenyl)
phenyl] sulfide;
(2-Isopropylphenyl)[2-nitro-4-(E-((4-methylaminocarbonylpiperazin-1-
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- yl)carbonyl)ethenyl) phenyl] sulfide;
- (2-Isopropylphenyl)[2-nitro-4-(E-((4-(pyrimidin-2-yl)piperazin-1-yl)carbonyl)ethenyl) phenyl] sulfide;
- (2-Isopropylphenyl)[2-nitro-4-(E-((4-hydroxyacetylpiperazin-1-yl)carbonyl)ethenyl) phenyl] sulfide;
- (2-Isopropylphenyl)[2-nitro-4-(E-((4-(pyrazine-2-carbonyl)piperazin-1-
- yl)carbonyl)ethenyl) phenyl] sulfide;
- (2-Isopropylphenyl)[2-trifluoromethyl-4-(E-(((2-carbox)pyrrol-3-ene-1-
- yl)carbonyl)ethenyl) phenyl] sulfide methyl ester;

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(2-1) sopropylphenyl) [2-nitro-4-(E-((3-hydroxymethyl-4-methylpiperazin-1-
vl)carbonyl)ethenyl) phenyl] sulfide;
(2-Isopropylphenyl)[2-trifluoromethyl-4-(E-(((2-carboxypyrrol-3-ene-1-
yl)carbonyl)ethenyl) phenyl] sulfide;
(2-Isopropylphenyl)[2-trifluoromethyl-4-(E-(((2-hydroxymethylpyrrolidin-1-
yl)carbonyl)ethenyl) phenyl] sulfide;
(2-Isopropylphenyl)[2-nitro-4-(E-((3-methylaminocarbonyl)piperazin-1-
yl)carbonyl)ethenyl) phenyl] sulfide;
(2-Isopropylphenyl)[2-nitro-4-(E-(((3-cyclopropylaminocarbonyl)piperazin-1-
yl)carbonyl)ethenyl) phenyl] sulfide;
(2-Isopropylphenyl)[2-hitro-4-(E-((3-carboxamidopiperazin-1-yl)carbonyl)ethenyl)
phenyl] sulfide;
(2-Isopropylphenyl)[2-nitro-4-(E-((3-carbomethoxy-4-oxopiperidin-1-
yl)carbonyl)ethenyl) phenyl\sulfide;
(2-Isopropylphenyl)[2-nitro-4-(E-((3,5-dimethylpiperazin-1-yl)carbonyl)ethenyl)
sulfide;
(1-\text{Ethylindol-}7-y1)[2-\text{chloro-}4-(E\setminus((4-\text{acetylpiperazin-}1-y1)\text{carbonyl})\text{ethenyl}) phenyl]
sulfide;
(3-[2-Methoxy]ethoxyphenyl)-[2-chloro-4-(E-[(morpholin-1-yl)carbonyl]ethenyl)phenyl]
sulfide:
(2-Bromophenyl)[2-chloro-4-(E-((4,4'-$\dioxythiomorpholin-1-yl)carbonyl)
ethenyl)phenyl]sulfide;
(2-Bromophenyl)[2-chloro-4-(E-(N-carbomethoxymethyl-N-(3-(2-oxopyrrolidin-1-
yl)prop-1-yl)amino)carbonyl) ethenyl)phenyl\sulfide;
(2-Bromophenyl)[2-chloro-4-(E-((4-S-oxythiomorpholin-1-yl)carbonyl)
ethenyl)phenyl]sulfide;
(2-Methoxy-5-chlorophenyl)[2-nitro-4-(E-((4-acetylpiperazin-1-yl)carbonyl)ethenyl)
phenyl] sulfide;
(2-Isopropylphenyl)[2-nitro-4-(E-((3-acetoxymethyl)piperazin-1-yl)carbonyl)ethenyl)
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phenyl] sulfide;

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 \&-Isopropylphenyl)[2-nitro-4-(E-((3,5-dimethyl-4-acetyl-piperazin-1-
 yl)carbonyl)ethenyl) phenyl] sulfide;
 (1-Methylindol-5-yl)[2-chloro-4-(E-((4-acetylpiperazin-1-yl)carbonyl)ethenyl) phenyl]
 sulfide;
 (Benzodioxan-6-yl)[2-nitro-4-(E-((4-acetylpiperazin-1-yl)carbonyl)ethenyl) phenyl]
 sulfide:
 (Benzodioxan-6-yl)[2-nitro-4-(E-((3-(2-oxopyrrolidin-1-yl)prop-1-ylamino)carbonyl)
 ethenyl)phenyl]sulfide;
 (Benzodioxan-6-yl)[2-nitro-4-(E-((3-carboethoxypiperidin-1-yl) carbonyl)ethenyl)
 phenyl] sulfide;
 (Benzodioxan-6-yl)[2\nitro-4-(E-((4-carboethoxypiperidin-1-yl) carbonyl)ethenyl)
 phenyl] sulfide;
 (2-Ethoxyphenyl)[2-trifluoromethyl-4-(Z-((4-acetylpiperazin-1-yl)carbonyl)ethenyl)
 phenyl] sulfide;
 (2-Ethoxyphenyl)[2-trifluoromethyl-4-(E-((6-methylpyrid-2-ylamino)carbonyl)ethenyl)
 phenyl] sulfide;
 (2-Methyl-3-chlorophenyl)[2-nitro-4-(E-((4-acetylpiperazin-1-yl)carbonyl)ethenyl)
 phenyl] sulfide:
 (Benzodioxan-6-yl)[2-nitro-4-(E-((3-carboxamidopiperidin-1-yl) carbonyl)ethenyl)
 phenyl] sulfide;
 (Benzodioxan-6-yl)[2-nitro-4-(E-((2-carboethoxypiperidin-1-yl) carbonyl)ethenyl)
 phenyl] sulfide;
 (Benzodioxan-6-yl)[2-nitro-4-(E-((4-carboxamidopiperidin-1-yl) carbonyl)ethenyl)
phenyl] sulfide;
 (Benzodioxan-6-yl)[2-nitro-4-(E-((4-tert-butoxycarbonylpiperazin-1-yl)
carbonyl)ethenyl) phenyl] sulfide;
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(2-Isopropylphenyl)[2-nitro-4-(E-((syn-3,5-dimethylmorpholin-1-yl)carbonyl)ethenyl) phenyl] sulfide;

(2-Isopropylphenyl)[2-nitro-4-(E-((anti-3,5-dimethylmorpholin-1-yl)carbonyl)ethenyl) phenyl] sulfide;

(2-Isopropylphenyl)[2-nitro-4-(E-((3-carboethoxypiperazin-1-yl)carbonyl)ethenyl) phenyl] sulfide; (2-Isopropylphenyl)[2-nitro-4-(E-((3-isopropoxycarbonylpiperazin-1yl)carbonyl)ethenyl) phenyl] sulfide; (2-Isopropylphenyl)[2-nitro-4-(E-((3-(dimethylaminocarbonyl)-4-methylpiperazin-1yl)carbonyl)ethenyl) phenyl] sulfide; (2-Isopropylphenyl)[2-nitro-4-(E-((3-carbomethoxy-4-hydroxypiperidin-1yl)carbonyl)ethenyl) phenyl] sulfide; (2-Isopropylpheny) [2-nitro-4-(E-((3-hydroxymethyl-4-hydroxypiperidin-1yl)carbonyl)ethenyl) phenyl] sulfide; (2-Ethoxyphenyl)[2-trifluoromethyl-4-(E-((2-carbomethoxy-4-(methoxycarbonyl)piperaxin-1-yl)carbonyl)ethenyl) phenyl] sulfide; (2-Ethoxyphenyl)[2-trifluoromethyl-4-(E-((2-carbomethoxy-4-methyl piperazin-1yl)carbonyl)ethenyl) phenyl] sulfide; (2-Ethoxyphenyl)[2-trifluoromethyl-4-(E-((2-carboxy-4-(methoxycarbonyl)piperazin-1yl)carbonyl)ethenyl) phenyl] sulfide; (Indol-6-yl)[2-chloro-4-(E-((4-acetylpiperazin-1-yl)carbonyl)ethenyl) phenyl] sulfide; (1-Ethyl-3-(dimethylaminomethyl)indol-7-yl)[2-chloro-4-(E-((4-acetylpiperazin-1yl)carbonyl)ethenyl) phenyll sulfide: (5-Ethoxybenzodioxan-6-yl)[2-chloro-4-(E-((4-acetylpiperazin-1-yl)carbonyl)ethenyl)phenyl] sulfide; (2-Ethyl-4-bromophenyl)[2-nitro-4-(E-((4-adetylpiperazin-1-yl)carbonyl)ethenyl) phenyl] sulfide; (Benzodioxan-6-yl)[2-nitro-4-(E-((2-carboxypiperidin-1-yl) carbonyl)ethenyl) phenyl] sulfide: (Benzodioxan-6-yl)[2-nitro-4-(E-((4-carboxymethyl)perazin-1-yl) carbonyl)ethenyl) phenyl] sulfide; (3-Morpholinophenyl)[2-nitro-4-(E-((4-acetylpiperazin-\frac{1}{2}yl)carbonyl)ethenyl) phenyl] sulfide; (5-Ethoxybenzodioxan-8-yl)[2-chloro-4-(E-((4-acetylpiperazin-1-yl)carbonyl)ethenyl)

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phenyl] sulfide;

(5-Chloro-8-ethoxyquinolin-7-yl)[2-chloro-4-(*E*-((4-acetylpiperazin-1-yl)carbonyl)ethenyl) phenyl] sulfide;
(2-Isopropylphenyl)[2-nitro-4-(*E*-((3-carboethoxypiperidin-1-yl)carbonyl)ethenyl) phenyl] sulfide;

(2-Isopropylphenyl)[2-nitro-4-(E-((3-carboxypiperidin-1-yl)carbonyl)ethenyl) phenyl] sulfide;

(2-Isopropylphenyl)[2-nitro-4-(*E*-(((3-ethanesulfonylaminocarbonyl)piperidin-1-yl)carbonyl)ethenyl) phenyl] sulfide;

(2-Isopropylphenyl)[2-nitro-4-(E-(((3-(4-methylpiperazine) sulfonylaminocarbonyl)piperidin-1-yl)carbonyl)ethenyl) phenyl] sulfide;

(2-Isopropylphenyl)[2-nitro-4-(E-(((3-p-toluenesulfonylaminocarbonyl)piperidin-1-yl)carbonyl)ethenyl) phenyl] sulfide;

(2-Isopropylphenyl)[2-nitro-4] (E-((3-methyl-4-acetylpiperazin-1-yl)carbonyl)ethenyl) phenyl] sulfide;

(2-Hydroxyphenyl)-[2-chloro-4-(È-[(morpholin-1-yl)carbonyl]ethenyl)phenyl]sulfide; (1-(Carboxymethyl)indol-5-yl)[2-chloro-4-(E-((4-acetylpiperazin-1-yl)carbonyl)ethenyl) phenyl] sulfide;

(Benzodioxan-6-yl)[2-trifluoromethyl-4-(E-((4-acetylpiperazin-1-yl)carbonyl)ethenyl) phenyl] sulfide;

(2-Isopropylphenyl)[2-nitro-4-(*E*-((3-(2-oxopyrrolidin-1-yl)prop-1-ylamino) carbonyl)ethenyl) phenyl] sulfide;

(3-(2-Morpholinoethylamino)phenyl)[2-trifluoromethyl-4-(*E*-((4-acetylpiperazin-1-yl)carbonyl)ethenyl) phenyl] sulfide;

(2-Pyrrolidin-1-ylphenyl)[2-nitro-4-(*E*-((4-acetylpiperazin-1-yl)carbonyl)ethenyl) phenyl] sulfide;

(3-Bromophenyl)[2-nitro-4-(E-((3-carboethoxypyrrolidin-1-yl)carbonyl)ethenyl) phenyl] sulfide;

(3-Bromophenyl)[2-nitro-4-(*E*-((4-carboethoxypyrrolidin-1-yl)carbonyl)ethenyl) phenyl] sulfide;

(2-(Hydroxymethyl)-benzodioxan-6-yl)[2-chloro-4-(*E*-((4-acetylpiperazin-1-yl)carbonyl)ethenyl) phenyl] sulfide;

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(3-(Dimethylaminomethyl)indol-5-yl)[2-chloro-4-(E-((4-acetylpiperazin-1-
yl)carbonyl)ethenyl) phenyl] sulfide;
(2-Isopropylphenyl)[2-nitro-4-(E-((2-carboethoxypiperidin-1-yl)carbonyl)ethenyl)
phenyl] sulfide;
(2-Isopropylphenyl)[2-nitro-4-(E-((2-carboxypiperidin-1-yl)carbonyl)ethenyl) phenyl]
sulfide;
(2-Isopropylphenyl) 2-nitro-4-(E-((4-carboethoxypiperidin-1-yl)carbonyl) ethenyl)
phenyl] sulfide;
(2-Isopropylphenyl)[2-nitro-4-(E-((4-carboxypiperidin-1-yl)carbonyl)ethenyl) phenyl]
sulfide:
(2-\text{Isopropylphenyl})[2-\text{nitro} 4-(E-(((4-p-\text{toluenesulfonylaminocarbonyl})piperidin-1-
yl)carbonyl)ethenyl) phenyl] sulfide;
(2-Isopropylphenyl)[2-nitro-4-(Æ-((3-carboxy-4-hydroxypiperidin-1-yl)carbonyl)ethenyl)
phenyl] sulfide;
(Benzodioxan-6-yl)[2-trifluoromethyl-4-(E-((3-carboethoxypiperidin-1-yl)
carbonyl)ethenyl) phenyl] sulfide;
(Benzodioxan-6-yl)[2-trifluoromethyl-4-(E-((2-carboethoxypiperidin-1-yl)
carbonyl)ethenyl) phenyl] sulfide;
(Benzodioxan-6-yl)[2-nitro-4-(E-((4-carb\darb\darb\darb)piperidin-1-yl) carbonyl)ethenyl) phenyl
sulfide;
(Benzodioxan-6-yl)[2-trifluoromethyl-4-(E-(\(\beta\)-carboxypyrrolidin-1-yl)carbonyl)ethenyl)
phenyl] sulfide;
(Benzodioxan-6-yl)[2-trifluoromethyl-4-(E-((4-carboethoxypiperidin-1-yl)
carbonyl)ethenyl) phenyl] sulfide;
(Benzodioxan-6-yl)[2-trifluoromethyl-4-(E-((2-carbo methoxy-4-tert-
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butoxycarbonylpiperazin-1-yl) carbonyl)ethenyl) phenyl] sulfide;

(Benzodioxan-6-yl)[2-trifluoromethyl-4-(E-((2-carbomethoxy-4-

methoxycarbonylpiperazin-1-yl) carbonyl)ethenyl) phenyl] sulfide;

(Benzodioxan-6-yl)[2-trifluoromethyl-4-(E-((3-(2-oxopyrrolidin-1-yl)prop-1-

ylamino)carbonyl) ethenyl)phenyl]sulfide;

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(Benzodioxan-6-yl)[2-trifluoromethyl-4-(E-((2-carbomethoxypiperazin-1-yl)
 carbonyl)ethenyl) phenyl] sulfide;
 (2-Methyl-3-(carboethoxymethyl)indol-5-yl)[2-trifluoromethyl-4-(E-((morpholin-1-
 yl)carbonyl)ethenyl) phenyl] sulfide;
 (1-(2-Methoxyethyl)indol-5-yl)[2-chloro-4-(E-((4-acetylpiperazin-1-yl)carbonyl)ethenyl)
phenyl] sulfide;
 (2-Isopropylphenyl)[2-nitro-4-(E-((3-acetoxymethyl-4-hydroxypiperidin-1-
yl)carbonyl)ethenyl) phenyl] sulfide;
 (2-Isopropylphenyl)[2-nitro-4-(E-((3-(dimethylaminocarbonyl)-4-hydroxypiperidin-1-
yl)carbonyl)ethenyl) phenyl] sulfide;
 (2-Isopropylphenyl)[2-\hat{nitro-4-(E-((3-cyanomorpholin-1-yl)carbonyl)ethenyl) phenyl]
sulfide;
(2-Isopropylphenyl)[2-nitro 4-(E-((3-carboethoxymorpholin-1-yl)carbonyl)ethenyl)
phenyl] sulfide;
 (2-Isopropylphenyl)[2-nitro-4-(\(\hat{L}\)-((3-(tetrazol-5-yl)morpholin-1-yl)carbonyl)ethenyl)
phenyl] sulfide;
(Benzodioxan-6-yl)[2-trifluoromethyl-4-(E-((4-carboxypiperidin-1-yl) carbonyl)ethenyl)
phenyl] sulfide;
(Benzodioxan-6-yl)[2-trifluoromethyl-4] (E-((2-carboxypiperidin-1-yl)\ carbonyl) ethenyl)\\
phenyl] sulfide;
(Benzodioxan-6-yl)[2-trifluoromethyl-4-(E-)(4-carbomethoxypiperazin-1-yl)
carbonyl)ethenyl) phenyl] sulfide:
(Benzodioxan-6-yl)[2-trifluoromethyl-4-(E-((3-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\frac{1}{2}za-6,9-\f
yl)carbonyl)ethenyl) phenyl] sulfide;
(Benzodioxan-6-yl)[2-trifluoro-4-(E-((4-(2-oxo-2,3-dihydro-1H-benzimidazole-1-
yl)piperidin-1-yl)carbonyl)ethenyl) phenyl] sulfide:
(Benzodioxan-6-yl)[2-trifluoromethyl-4-(E-((4-(methylàminocarbonyl)piperidin-1-
yl)carbonyl)ethenyl) phenyl] sulfide;
(Benzodioxan-6-yl)[2-trifluoromethyl-4-(E-((3-carbomethoxy-4-
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methoxycarbonylpiperazin-1-yl) carbonyl)ethenyl) phenyl] sulfide;

(2-Isopropylphenyl)[2-nitro-4-(E-((3-carboxymorpholin-1-yl)carbonyl)ethenyl) phenyl sulfide; (Ben zodioxan-6-yl)[2-trifluoromethyl-4-(E-((2-carboxy-4-methoxycarbonylpiperazin-1yl) carbonyl)ethenyl) phenyl] sulfide; (Benzodioxan-6-yl)[2-trifluoromethyl-4-(E-((morpholin-1-yl)carbonyl)ethenyl) phenyl] sulfide; (Benzodioxan-6-yl)[2-trifluoromethyl-4-(E-((4-(pyrrolidin-1-yl)piperidin-1yl)carbonyl)ethenyl) phenyl] sulfide; (2-Isopropylphenyl)[2-nitro-4-(E-((3-aza-6.9-dioxaspiro[5.4]decan-1yl)carbonyl)ethenyl) phenyl] sulfide; (2-Isopropylphenyl)[2-nitro-4-(E-((2-(dimethylaminomethyl)piperidin-1yl)carbonyl)ethenyl) phenyl] sulfide; (2-Isopropylphenyl)[2-nitro-4-(E-((piperidin-1-ylamino)carbonyl)ethenyl) phenyl] sulfide; (Benzodioxan-6-yl)[2-trifluoromethyl-4-(E-((3-carboxy-4-methoxycarbonylpiperazin-1yl) carbonyl)ethenyl) phenyl] sulfide; (2-(Dimethylaminocarbonyl)-behzodioxan-6-yl)[2-chloro-4-(E-((4-acetylpiperazin-1yl)carbonyl)ethenyl) phenyll sulfide: (2-Isopropylphenyl)[2-nitro-4-(E-((3-(2-(methoxymethyl)tetrazol-5-yl) piperidin-1yl)carbonyl)ethenyl) phenyll sulfide;  $(2-Isopropylphenyl)[2-nitro-4-(E-((3-(1\((methoxymethyl))tetrazol-5-yl))piperidin-1$ yl)carbonyl)ethenyl) phenyll sulfide: (1-Methylindol-5-yl)[2-chloro-4-(E-((3-(2-0xopyrrolidin-1-yl)propylamino)carbonyl)ethenyl) phenyl] sulfide; (2-Isopropylphenyl)[2-nitro-4-(E-((3-(tetrazol-5-yl) piperidin-1-yl)carbonyl)ethenyl) phenyl] sulfide; (1-Methylindol-5-yl)[2-chloro-4-(E-((3-carboethoxypiperidin-1-yl)carbonyl)ethenyl) phenyl] sulfide; (1-Methylindol-5-yl)[2-chloro-4-(E-((3-carboxypiperidin-1-yl)carbonyl)ethenyl) phenyl]

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sulfide;

 $\lambda 1$ -Methylindol-5-yl)[2-chloro-4-(E-((4-carboethoxypiperidin-1-yl)carbonyl)ethenyl) phenyl] sulfide; (1-Methylindol-5-yl)[2-chloro-4-(E-((4-carboxypiperidin-1-yl)carbonyl)ethenyl) phenyl] sulfidà; (2-Isopropylphenyl)[2-nitro-4-(E-((2-(1-methylpyrrolidin-2yl)ethylamino)carbonyl)ethenyl) phenyl] sulfide; (2-Isopropylphenyl)[2-nitro-4-(E-((4-(pyrrolidin-1-yl)piperidin-1-yl)carbonyl)ethenyl) phenyl] sulfide (2-Isopropylphenyl)[2-nitro-4-(E-((4-sulfopiperidin-1-yl)carbonyl)ethenyl) phenyl] sulfide: (2-Isopropylphenyl)[\frac{2}{nitro-4-(E-((3-hydroxypiperidin-1-yl)carbonyl)ethenyl) phenyl] sulfide: (Benzodioxan-6-yl)[2-triNuoromethyl-4-(E-((3-((ethanesulfonylamino)carbonyl)piperidin-1-yl) carbonyl)ethenyl) phenyl] sulfide; (Benzodioxan-6-yl)[2-trifluoromethyl-4-(E-((3-((ptoluenesulfonylamino)carbonyl)piperidin-1-yl) carbonyl)ethenyl) phenyl] sulfide; (Benzodioxan-6-yl)[2-trifluoromethyl-4-(E-((4-((ethanesulfonylamino)carbonyl)piperidin-1-yl) carbonyl)ethenyl) phenyl] sulfide; (Benzodioxan-6-yl)[2-trifluoromethyl]4-(E-((2-(tetrazol-5-yl)morpholin-1vl)carbonyl)ethenyl) phenyl] sulfide;  $(2-\text{Isopropylphenyl})[2-\text{nitro-4-}(E-((2-\text{buty})_{\tau}5-(\text{tetrazol-5-yl})\text{morpholin-1-})]$ yl)carbonyl)ethenyl) phenyll sulfide: (2-(and 3-)(Hydroxymethyl)-benzodioxan-6-yl)[2-nitro-4-(E-((4-acetylpiperazin-1yl)carbonyl)ethenyl) phenyl] sulfide; (2-(and 3-)(Hydroxymethyl)-benzodioxan-6-yl)[2-nitro-4-(E-((3-(2-oxopyrrolidin-1yl)prop-1-ylamino)carbonyl) ethenyl)phenyllsulfide: (2-(and 3-)(Hydroxymethyl)-benzodioxan-6-yl)[2-trifluoromethyl-4-(E-((3-(2oxopyrrolidin-1-yl)prop-1-ylamino)carbonyl) ethenyl)phenyl]sulfide; (3-Hydroxymethyl)-benzodioxan-6-yl)[2-nitro-4-(E-((3-(2-oxopyrrolidin-1-yl)prop-1-

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ylamino)carbonyl) ethenyl)phenyl]sulfide;

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(\dot{B}enzodioxan-6-yl)[2-chloro-4-(E-((3-carboxypiperidin-1-yl)carbonyl)ethenyl)
phenyl]sulfide;
(2-(and 3-)(Aminomethyl)-benzodioxan-6-yl)[2-trifluoromethyl-4-(E-((3-(2-
oxopyrròlidin-1-yl)prop-1-ylamino)carbonyl) ethenyl)phenyl]sulfide;
(2-Isopropylphenyl)[2-nitro-4-(E-((3-(methylaminocarbonyl)morpholin-1-
yl)carbonyl)ethenyl) phenyl] sulfide;
(2-Isopropylphenyl)[2-nitro-4-(E-((3-(hydroxymethyl)morpholin-1-yl)carbonyl)ethenyl)
phenyl] sulfide;
(2-Isopropylphenyl) (2-Isopropylphenyl) (2-Isopropylphenyl) (2-Isopropylphenyl) (2-Isopropylphenyl)
phenyl] sulfide;
(2-Isopropylphenyl)[2-mitro-4-(E-((3-(aminomethyl)morpholin-1-yl)carbonyl)ethenyl)
phenyl] sulfide;
(2-Isopropylphenyl)[2-nitro\4-(E-((3-(acetamidomethyl)morpholin-1-
yl)carbonyl)ethenyl) phenyl] sulfide;
(Benzodioxan-6-yl)[2-chloro-4\(E-((3-(2-oxopyrrolidin-1-yl)prop-1-ylamino)carbonyl)
ethenyl)phenyl]sulfide;
(Benzodioxan-6-yl)[2-chloro-4-(E-\((3-carboethoxypiperidin-1-yl) carbonyl)ethenyl)
phenyl] sulfide;
(Benzodioxan-6-yl)[2-chloro-4-(E-((2-carboethoxypiperidin-1-yl) carbonyl)ethenyl)
phenyl] sulfide;
(2-Methoxyphenyl)-[2,3-dichloro-4-(E-[(morpholin-1-yl)carbonyl]ethenyl)phenyl]
sulfide;
(2-Methoxyphenyl)-[2,3-dimethyl-4-(E-[(morpholin-1-yl)carbonyl]ethenyl)phenyl]
sulfide;
(2-Isopropylphenyl)[2-nitro-4-(E-((indol-5-ylamino)carbonyl)ethenyl) phenyl] sulfide;
(Benzodioxan-6-yl)[2-chloro-4-(E-((3-carboxypiperidin-1-yl) carbonyl)ethenyl) phenyl]
sulfide;
(Benzodioxan-6-yl)[2-chloro-4-(E-((3-(tetrazol-5-yl)piperidin-1-yl) carbonyl)ethenyl)
phenyl] sulfide;
(Benzodioxan-6-yl)[2-chloro-4-(E-((4-(tert-butoxycarbonyl)piperazin-1-yl)
carbonyl)ethenyl) phenyl] sulfide;
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(\mathbb{B}enzodioxan-6-yl)[2-chloro-4-(E-((2-carboxypiperidin-1-yl) carbonyl)ethenyl) phenyl]
 sulfide;
 (Benzodioxan-6-yl)[2-chloro-4-(E-((3-(tetrazol-5-yl)morpholin-1-yl) carbonyl)ethenyl)
phenyl\ sulfide;
 (Benzodloxan-6-yl)[2-chloro-4-(E-((4-(methylaminocarbonyl)piperazin-1-yl)]
carbonyl)ethenyl) phenyl] sulfide;
(2-Methoxyphenyl)-[2,3-dichloro-4-(E-[(4-carboxypiperidin-1-yl)carbonyl]ethenyl)
phenyl] sulfide
(Benzodioxan-6-\frac{1}{2}-chloro-4-(E-((4-(tetrazol-5-yl)piperidin-1-yl) carbonyl)ethenyl)
phenyl] sulfide;
(2-Methoxyphenyl)-\(\frac{1}{3}\)-chloro-4-(\(E\)-[(morpholin-1\)-yl)carbonyl]ethenyl)phenyl]sulfide;
(2-Isopropylphenyl)[2\nitro-4-(E-((4-oxopiperidin-1-yl)carbonyl)ethenyl) phenyl]
sulfide;
(Benzodioxan-6-yl)[2-trifluoromethyl-4-(E-((3-R-carboethoxypiperidin-1-
yl)carbonyl)ethenyl) phenyl] sulfide;
(Benzodioxan-6-yl)[2-trifluoromethyl-4-(E-((3-R-carboxypiperidin-1-
yl)carbonyl)ethenyl) phenyl] sulfide;
(Benzodioxan-6-yl)[2,3-dichlor \\ \\ q-4-(E-((3-(2-oxopyrrolidin-1-yl)prop-1-yl)prop-1-yl)] \\ \\ = (2-oxopyrrolidin-1-yl)prop-1-yl)[2,3-dichlor \\ \\ = (2-oxopyrolidin-1-yl)prop-1-yl)[2,3-dichlor \\ \\ = (2-oxopyrolidin-1-yl)prop-1-yl)[2,3-dichlor \\ = (2-oxopyrolidin-1-yl)prop-1-yl)[2,3-dichlor \\ \\ = (2-oxopyrolidin-1-yl)prop-1-yl)[2,3-dichlor \\
ylamino)carbonyl) ethenyl)phenyl|sulfide;
(Benzodioxan-6-yl)[2,3-dichloro-4\(E-((4-acetylpiperazin-1-yl) carbonyl)ethenyl)
phenyl] sulfide;
(Benzodioxan-6-yl)[2,3-dichloro-4-(E_{1}^{\prime}((3-carboethoxypiperidin-1-yl)\ carbonyl)ethenyl)
phenyll sulfide;
(Benzodioxan-6-yl)[2,3-dichloro-4-(E-((4-carboethoxypiperidin-1-yl) carbonyl)ethenyl)
phenyl] sulfide;
(Benzodioxan-6-yl)[2,3-dichloro-4-(E-((3-c\arboxypiperidin-1-yl) carbonyl)ethenyl)
phenyll sulfide;
(Benzodioxan-6-yl)[2,3-dichloro-4-(E-((4-carboxypiperidin-1-yl) carbonyl)ethenyl)
phenyl] sulfide;
(2-Isopropylphenyl)[2,3-dichloro-4-(E-((3-(2-oxopyrrolidin-1-yl)propylamino)
carbonyl)ethenyl) phenyl] sulfide;
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(2-Isopropylphenyl)[2,3-dichloro-4-(E-((4-acetylpiperazin-1-yl) carbonyl)ethenyl) phenyl] sulfide;
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- (2-Isopropylphenyl)[2,3-dichloro-4-(E-((3-carboethoxypiperidin-1-yl) carbonyl)ethenyl) phenyl $\chi$  sulfide;
- (2-Isopropylphenyl)[2,3-dichloro-4-(*E*-((4-carboethoxypiperidin-1-yl) carbonyl)ethenyl) phenyl] sulfide;
- (2-Isopropylphenyl)[2,3-dichloro-4-(*E*-((3-carboxypiperidin-1-yl) carbonyl)ethenyl) phenyl] sulfide,
- (2-Isopropylphenyl)[2,3-dichloro-4-(*E*-((4-carboxypiperidin-1-yl) carbonyl)ethenyl) phenyl] sulfide;
- (1-Methylindol-5-yl)[2,3-dichloro-4-(E-((3-carboethoxypiperidin-1-yl) carbonyl)ethenyl) phenyl] sulfide;
- (1-Methylindol-5-yl)[2,3-dichloro-4-(*E*-((3-carboxypiperidin-1-yl) carbonyl)ethenyl) phenyl] sulfide;
- (1-Methylindol-5-yl)[2,3-dichloro-4-(*E*-((4-carboethoxypiperidin-1-yl) carbonyl)ethenyl) phenyl] sulfide;
- (1-Methylindol-5-yl)[2,3-dichloro\4-(E-((4-carboxypiperidin-1-yl) carbonyl)ethenyl) phenyl] sulfide;
- (2-Ethoxyphenyl)-[2,3-dichloro-4-(*E*-[(4-carboxypiperidin-1-yl)carbonyl]ethenyl) phenyl] sulfide;
- (2-Ethoxyphenyl)-[2,3-dichloro-4-(E-[(morpholin-1-yl)carbonyl]ethenyl)phenyl] sulfide;
- (2-Ethoxyphenyl)-[2,3-dichloro-4-(*E*-[(3-carboxypiperidin-1-yl)carbonyl]ethenyl) phenyl] sulfide;
- (2-Isopropylphenyl)[2-nitro-4-(*E*-((3-carboethoxypyrrolidin-1-yl)carbonyl)ethenyl) phenyl] sulfide;
- (2-Isopropylphenyl)[2-nitro-4-(*E*-((3-carboxypyrròlidin-1-yl)carbonyl)ethenyl) phenyl] sulfide;
- (2-Isopropylphenyl)[2,3-difluoro-4-(*E*-((3-carboethoxypiperidin-1-yl)carbonyl)ethenyl) phenyl] sulfide;
- (2-Isopropylphenyl)[2,3-difluoro-4-(*E*-((3-carboxypiperidin-1-yl)carbonyl)ethenyl) phenyl] sulfide;



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(2-Isopropylphenyl)[2,3-difluoro-4-(E-((4-carboxypiperidin-1-yl)carbonyl)ethenyl) phenyl] sulfide; (Benzodioxan-6-yl)[2-trifluoromethyl-4-(E-((3-ethoxycarbonylpyrrolidin-1yl)carbonyl)ethenyl) phenyl] sulfide; (Benzodiòxan-6-yl)[2-trifluoromethyl-4-(E-((3-carboxypyrrolidin-1-yl)carbonyl)ethenyl) phenyl] sulfide; (2-Methoxyphenyl)[2-chloro-3-trifluoromethyl-4-(E-((4-carboethoxypiperidin-1yl)carbonyl)ethenyl) phenyl] sulfide; (2-Methoxyphenyl)[2-chloro-3-trifluoromethyl-4-(E-((4-carboxypiperidin-1yl)carbonyl)ethenyl) phenyl] sulfide; (2-Methoxyphenyl)[2-\danhloro-3-trifluoromethyl-4-(E-((morpholin-1-yl)carbonyl)ethenyl) phenyl] sulfide; (Benzodioxan-6-yl) [4-(E-(4-carboxypiperidin-1-yl) carbonyl) ethenyl)naphthyl] sulfide: (2-Methoxyphenyl) [2,3-dichloro-4-(E-((4-2,4-dioxo-1,3,8-triazaspiro[4.5])-piperidin-1yl)carbonyl)ethenyl)phenyl] sulfide; (2-Methoxyphenyl)[2,3-dichlor $\partial_{\tau}4$ -(E-((4-ethylpiperazin-1-yl)carbonyl)ethenyl)phenyl] sulfide: (2-Isopropylphenyl)[2,3-dichloro-4-(E-((4-(2-(2-hydroxyethoxy)ethyl)piperazin-1yl)carbonyl)ethenyl)phenyl] sulfide; (Benzodioxan-6-yl)[2,3-bis(trifluoromethyl)-4-(E-((4-carboxypiperidin-1yl)carbonyl)ethenyl)phenyl]sulfide; (2-Methoxyphenyl) [2,3-dichloro-4-(E-((4-(carboxymethylamino)carbonyl-piperidin-1yl)carbonyl)ethenyl)phenyl] sulfide; (2-Methoxyphenyl) [2,3-bis(trifluoromethyl)-4-(E-((4-carboxymethylpiperazin-1-yl) carbonyl)ethenyl)phenyl]sulfide: (2-Methoxyphenyl) [2,3-bis(trifluoromethyl)-4-(E-((4-N-(2-hydroxyethyl)piperazin-1yl)carbonyl)ethenyl)phenyl]sulfide; (1-Methylindol-5-yl) [2,3-dichloro-4-(E-((4-(carbo-2,3-dihydroxypropylamino)piperidin-1-yl)carbonyl)ethenyl)phenyl] sulfide; (2-Methoxyphenyl) [2,3-dichloro-4-(E-(4-(2,3-dihydroxypropionyl)piperazin-1yl)carbonyl)ethenyl)phenyl] sulfide;

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(2-Methoxyphenyl) [2,3-dichloro-4-(E-(4-(2,3-dihydroxy-3-carboxypropionyl)piperazin-1-yl)carbonyl)ethenyl)phenyl] sulfide;
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(1-Methylindol-5-yl) [2,3-dichloro-4-(E-((4-(carboxymethylamino)carbonyl-piperidin-1-yl)carbonyl)ethenyl)phenyl] sulfide;

(1-Methylandol-5-yl) [2,3-dichloro-4-(*E*-((4-sulfopiperidin-1-yl)carbonyl)ethenyl)phenyl] sulfide;

(1-Methylindol\5-yl) [2,3-dichloro-4-(*E*-(4-methylhomopiperazin-1-ylcarbonyl)ethenyl) sulfide;

(1-Methylindol-5-yl) [2,3-dichloro-4-(E-(4-tetrahydrofuroylpiperazin-1-

yl)carbonyl)ethenyl)phenyl] sulfide;

(Benzodioxan-6-yl)[2-(benzodioxan-6-sulfanyl)-4-(E-((4-

morpholino)carbonyl)ethenyl)phenyl]sulfide;

(2-Methoxyphenyl) [2,3-dichloro-4-(E-((4-amino-4-carboxypiperidin-1-

yl)carbonyl)ethenyl)phenyl] sulfide;

(2-Methoxyphenyl)[2,3-dichloro-4-((4-furoylpiperazin-1-yl)carbonyl)ethenyl)phenyl] sulfide;

(1-Methylindol-5-yl) [2,3-dichloro-4-(E-(4-(carbo-3-sulfopropylamino)piperadin-1-

yl)carbonyl)ethenyl)phenyl] sulfide;

(2-Methoxyphenyl)[2,3-dichloro-4-(E-\(4-acetylamino-4-carboxypiperidin-1-

ylcarbonyl)ethenyl)phenyl] sulfide;

(2-Methoxyphenyl) [2,3-bis(trifluoromethyl)-4-(E-((4-carboxypiperidin-1-

yl)carbonyl)ethenyl)phenyl]sulfide;

(2-Methoxyphenyl) 5-[8-(E-((4-(aminocarbonxl)piperidin-1-

yl)carbonyl)ethenyl)quinolinyl]sulfide;

(2-Methoxyphenyl) [2-trifluoromethyl-4-(E-((4-carboxypiperidin-1-

yl)carbonyl)ethenyl)phenyl]sulfide;

(1-Methylindol-5-yl)[2,3-dichloro-4-(E-(((1S,4S)-5-tert-butyloxycarbonyl-2,5-

diazabicyclo(2.2.1)heptan-2-yl)carbonyl)ethenyl)phenyl]sulfide;

 $(1-Methylindol-5-yl) \ [\ 2,3-dichloro-4-(\it{E/Z-((1S,4S)-2,5-diazabicyclo(2.2.1)heptan-2-ylcarbonyl)ethenyl)phenyl] \ sulfide;$ 

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(1\Methylindol-5-yl) [2,3-dichloro-4-(E-(4-hydroxy-3-carboxypiperidin-1-
ylcarbonyl)ethenyl)phenyl] sulfide;
(1-Methylindol-5-yl) [2,3-dichloro-4-(E-(S-oxothiomorpholin-1-
ylcarbonyl)ethenyl)phenyl] sulfide;
(2-Methoxyphenyl) [2,3-dichloro-4-(E-((4-sulfophenylamino)carbonyl)ethenyl)phenyl]
sulfide;
(2-Methoxyphenyl) [2,3-dichloro-4-(E-((4-
carboxyphenylamino)carbonyl)ethenyl)phenyl] sulfide;
[3-(4-Morpholino)phenyl] [2,3-dichloro-4-(E-[(4-carboxypiperidin-1-
yl)carbonyl]ethenyl)phenyl] sulfide;
(2-Methoxyphenyl)[2,3-\pis(trifluoromethyl)-4-(E-((4-phenylcarboxypiperidin-1-
yl)carbonyl)ethenyl)phenyl]sulfide;
(2-Methoxyphenyl) [2,3-dichloro-4-(E-(((4-hydroxylaminocarbonyl)piperidin-1-
vl)carbonyl)ethenyl)phenyl] sulfide;
(2-Methoxyphenyl) [2,3-dichloro-4-(E-((N-carboxymethyl-N-
phenylamino)carbonyl)ethenyl)phenyl] sulfide;
(2-Methoxyphenyl) [3-chloro-6-hydroxy-4-(E-((3-carboxypiperidin-1-
yl)carbonyl)ethenyl)phenyl]sulfide;
(2-Methoxyphenyl) [2,3-dichloro-4-(E-\A-((1-(2-phenyl-1-
carboxyethyl)amino)carbonyl)piperidin-1\yl)carbonyl)ethenyl)phenyl]sulfide;
(2-Methoxyphenyl) [2,3-dichloro-4-(E-(4-(\lambda1-(2-hydroxy-1-
carboxyethyl)amino)carbonyl)piperidin-1-yl)carbonyl)ethenyl)phenyl]sulfide;
(3-(1-(3-Carboxypiperidinyl)phenyl)[2,3-dichloro-4-(E-((1,2,5,6-tetrahydropyridin-1-
yl)carbonyl)ethenyl)phenyl]sulfide;
(3-(4-Pyrrolidin-1-yl)piperidin-1-yl)phenyl) [2,3-dichloro-4-(E-(((3-(2-oxopyrrolidin-1-
yl)propylamino)carbonyl)ethenyl)phenyl]sulfide;
[3-(4-(Spiro-2,2-dioxolanyl)piperidin-1-yl)phenyl] [2,3-dichloro-4-(E-((4-
morpholinyl)carbonyl)ethenyl)phenyl]sulfide;
[3-(3-Carboxylpiperidin-1-yl)phenyl] [2,3-dichloro-4-(E-(4-carboxypiperidin-1-
yl)carbonyl]ethenyl)phenyl] sulfide;
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SUB 1 A/S (2-(2-Carboxy)ethenyl)phenyl) [2,3-dichloro-4-(E-((4-

morpholinyl)carbonyl)ethenyl)phenyl]sulfide;

[3-(4\Carboxylpiperidin-1-yl)phenyl] [2,3-dichloro-4-(E-[(1,2,3,6-tetrahydropyridin-1-

yl)carbonyl]ethenyl)phenyl] sulfide;

[3-(4-Carboxylpiperidinyl)phenyl] [2,3-dichloro-4-(E-[(4-

morpholinyl)carbonyl]ethenyl)phenyl] sulfide;

[2-(4-Acetylpiperazin-1-yl)phenyl] [2,3-dichloro-4-(E-[(4-carboxypiperidin-1-

yl)carbonyl]ethenxl)phenyl] sulfide;

3-(3-Carboxypiperidin-1-yl)phenyl] [2,3-dichloro-4-(E-[(4-

morpholinyl)carbonyl]ethenyl)phenyl] sulfide;

[3-(4-Carboxypiperidin-\u00e4-yl)phenyl] [2,3-dichloro-4-(E-[(4-

(dimethylaminosulfamoyl) niperazin-1-yl)carbonyl] ethenyl) phenyl] sulfide;

(2-Methoxyphenyl)[2,3-bis(trifluoromethyl)-4-(E-((3-carboxypiperidin-1-

yl)carbonyl)ethenyl)phenyl]sulfide;

(2-Methoxyphenyl) [2,3-bis(trifluoromethyl)-4-(E-((2-carboxypyrrolidin-1-

yl)carbonyl)ethenyl)phenyl]sulfide

[3-(4-Carboxypiperidin-1-yl)phenyl]\2,3-dichloro-4-(E-((4-

((trifluoromethylsulfonyl)piperazin-1-xl)carbonyl)ethenyl)phenyl] sulfide;

(2-Methoxyphenyl)[2,3-dichloro-4-(E-(piperidin-1-ylcarbonyl)ethenyl)phenyl] sulfide;

(2-Hydroxyphenyl) [2,3-dichloro-4-(E-((4\morpholino)carbonyl)ethenyl)phenyl]sulfide;

(2-Methoxyphenyl) [2,3-dichloro-4-(E-(((4

carboxyphenyl)methyl)amino)carbonyl)ethenyl)phenyl]sulfide;

(2-Methoxyphenyl) [2,3-dichloro-4-(E-(((4-pyrrolidin-1-yl)piperidin-1-

yl)carbonyl)ethenyl)phenyl]sulfide;

(2-Hydroxyphenyl)[2,3-dichloro-4-(E-((4-carboxypiperidin-1-

yl)carbonyl)ethenyl)phenyl]sulfide;

[3-(4-Carboxypiperidin-1-yl)phenyl] [2,3-dichloro-4-( $\stackrel{\searrow}{E}_1$ ((4-((methylsulfonyl)piperazin-

1-yl)carbonyl)ethenyl)phenyl] sulfide;

(2-Aminophenyl) [2,3-dichloro-4-(E-((4-morpholinyl)carbonyl)ethenyl)phenyl] sulfide;

(3-(4-carboxypiperidin-1-yl)phenyl) [2,3-dichloro-4-(E-((S-o'xothiomorpholin-1-yl)phenyl)] (3-(4-carboxypiperidin-1-yl)phenyl) [2,3-dichloro-4-((S-o'xothiomorpholin-1-yl)phenyl)] (3-(4-carboxypiperidin-1-yl)phenyl) (3-(4-carboxypi

yl)carbonyl)ethenyl)phenyl] sulfide;

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[3-(4-Carboxypiperidin-1-yl)phenyl] [2,3-dichloro-4-(E-((4-hydroxypiperidin-1-
yl)carbonyl)ethenyl)phenyl] sulfide;
(2-Glycoxyphenyl) [2,3-dichloro-4-(E-((4-morpholino)carbonyl)ethenyl)phenyl]sulfide;
(2-(4-Butyroxy)phenyl)[2,3-dichloro-4-(E-((4-
morpholino)carbonyl)ethenyl)phenyl]sulfide;
[3-(4-Carboxypiperidin-1-yl)phenyl] [2,3-dichloro-4-(E-((4-hydroxyethylpiperazin-1-
yl)carbonyl)ethenyl)phenyl] sulfide;
[3-(4-Carboxypiperidin-1-yl)phenyl] [2,3-dichloro-4-(E-((4-furoylpiperazin-1-
yl)carbonyl)ethenyl)phenyl] sulfide;
[3-(4-Carboxypiperidin-1-xl)phenyl] [2,3-dichloro-4-(E-((pyrrolidin-1-
yl)carbonyl)ethenyl)phenyl] sulfide;
[3-(4-Carboxypiperidin-1-yl)phenyl] [2,3-dichloro-4-(E-
((diethylaminocarbonyl)ethenyl)phenyl] sulfide;
[3-(4-Carboxypiperidin-1-yl)phenyl] {2,3-dichloro-4-(E-((4-ethylpiperazin-
yl)carbonyl)ethenyl)phenyl] sulfide;
[3-(4-Carboxypiperidin-1-yl)phenyl] [2,3-dichloro-4-(E-((4-(aminocarbonyl)piperidin-1-
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[3-(4-Carboxypiperidin-1-yl)phenyl] [2,3-dichloro-4-(E-((4-(2-(ethoxyethyl)piperidin-1-

yl)carbonyl)ethenyl)phenyl] sulfide;

yl)carbonyl)ethenyl)phenyl] sulfide;

[3-((4-Carboxymethyl)piperazin-1-yl)phenyl] [(2,3-dichloro-4-(E-(4morpholinyl)carbonyl)ethenyl)phenyl] sulfide; [3-(4-\arboxypiperidin-1-yl)phenyl] [2,3-bis(trifluoromethyl)-4-(E-((4morpholino)carbonyl)ethenyl)phenyl]sulfide; (3-Hydroxyphenyl) [2,3-dichloro-4-(E-((4-morpholino)carbonyl)ethenyl)phenyl]sulfide; [3-(4-Butyroxy)phenyl] [2,3-dichloro-4-(E-((4morpholino)carbonyl)ethenyl)phenyl]sulfide; (2-Hydroxyphenyl) {2,3-bis(trifluoromethyl)-4-(E-((4morpholino)carbonyl)ethenyl)phenyl]sulfide; (3-Hydroxyphenyl)[2,3-bis(trifluoromethyl)-4-(E-((4morpholino)carbonyl)ethenyl)phenyl]sulfide; [3-(4-Carboxypiperidin-1-yl)phenyl] [2,3-bis(trifluoromethyl-4-(E-((4-hydroxypiperidin-1-yl)carbonyl)ethenyl)phenyl] sulfide; [3-(4-Carboxypiperidin-1-yl)phenyl] [2,3-bis(trifluoromethyl-4-(E-((1,2,5,6tetrahydropyridin-1-yl)carbonyl)ethenyl)phenyl] sulfide; [2-((4-Carboxy)butyloxy)phenyl] [2,3-dichloro-4-(E-((4morpholino)carbonyl)ethenyl)phenyl]sulfide; (2-Glycoxyphenyl) [2,3-bis(trifluoromethyl)-4-(E-((4morpholino)carbonyl)ethenyl)phenyl]sulfide; (2-(4-Butyroxy)phenyl)[2,3-bis(trifluoromethyl)-4-(E-((4morpholino)carbonyl)ethenyl)phenyl]sulfide: [3-(4-Carboxypiperidin-1-yl)phenyl] [2,3-bis(trifluoromethyl)-4-(E-((bis-(2ethoxyethyl)amino)carbonyl)ethenyl)phenyl] sulfide; [3-(4-Carboxypiperidin-1-yl)phenyl] [2,3-bis-(trifluoromethyl)-4-(E-((bis-(2hydroxypropyl)amino)carbonyl)ethenyl)phenyl] sulfide; [3-(4-Carboxypiperidin-1-yl)phenyl] [2,3-bis-(trifluoromethyl)-4-(E-((piperazin-1yl)carbonyl)ethenyl)phenyl] sulfide; (3-(4-Butyroxy)phenyl) 2,3-bis(trifluoromethyl)-4-(E-((4morpholino)carbonyl)ethenyl)phenyl]sulfide; [2-(3-Carboxypiperidin-1-yl)phenyl] [2,3-dichloro-4-(E-[(3-(2-\div xopyrrolidin-1yl)propylaminocarbonyl)ethenyl)phenyl] sulfide;



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[2-(3-Carboxypiperidin-1-yl)phenyl] [2,3-bis(trifluoromethyl)-4-(*E*-[(3-(2-oxopyrrolidin-1-yl)propylaminocarbonyl)ethenyl)phenyl] sulfide;

[2-(3-Carboxypiperidin-1-yl)phenyl] [2,3-dichloro-4-(*E*-((4-(2-hydroxyethyl)piperazin-1-yl)carbonyl)ethenyl)phenyl] sulfide;

[2-(3-Carboxypiperidin-1-yl)phenyl] [2,3-bis(trifluoromethyl)-4-(*E*-((1,2,5,6-tetrahydropyridin-1-yl)carbonyl)ethenyl)phenyl] sulfide;

[2-(3-Carboxypiperidin-1-yl)phenyl] [2,3-bis(trifluoromethyl)-4-(*E*-((4-(2-hydroxyethyl)piperazin-1-yl)carbonyl)ethenyl)phenyl] sulfide;

[2-(3-Carboxypiperidin-1-yl)phenyl] [2,3-bis(trifluoromethyl)-4-(*E*-((4-(2-(hydroxyethoxy)ethyl)piperazin-1-yl)carbonyl)ethenyl)phenyl] sulfide; and (3-(3-Propioxy)phenyl) [2,3-dichloro-4-(E-((4-morpholino)carbonyl)ethenyl)phenyl]sulfide.

13. A compound according to Claim 1 selected from the group consisting of:

(2-Formylphenyl)[2-nitro-4-(E-((4-acetylpiperazin-1-yl)carbonyl)ethenyl)phenyl] sulfide;

(2-Ethoxyphenyl)-[2-chloro-4(E-\((morpholin-1-yl)carbonyl]ethenyl)phenyl]sulfide;

(2-Isopropylphenyl)[2-nitro-4-(E-\((3-\)dimethylaminocarbonyl-4-acetylpiperazin-1-yl)carbonyl)ethenyl) phenyl] sulfide;\

(2-Isopropylphenyl)[2-nitro-4-( *E*-((4-methoxycarbonylpiperazin-1-yl)carbonyl)ethenyl) phenyl] sulfide;

(2-Ethoxyphenyl)[2-trifluoromethyl-4-( E ((2-carboxy-4-(methoxycarbonyl)piperazin-1-yl)carbonyl)phenyl] sulfide;

(2-Ethyl-4-bromophenyl)[2-nitro-4-(*E*-((4-acetylpiperazin-1-yl)carbonyl)ethenyl) phenyl] sulfide;

(3-Morpholinophenyl)[2-nitro-4-(*E*-((4-acetylpiperazin-1-yl)carbonyl)ethenyl) phenyl] sulfide;

(2-Isopropylphenyl)[2-nitro-4-( *E*-((3-carboethoxypheridin-1-yl)carbonyl)ethenyl) phenyl] sulfide;

(2-Isopropylphenyl)[2-nitro-4-( *E*-((3-(2-oxopyrrolidin\1-yl)prop-1-ylamino) carbonyl)ethenyl) phenyl] sulfide

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(2_{\tau}(Hydroxymethyl)-benzodioxan-6-yl)[2-chloro-4-(E-((4-acetylpiperazin-1-
yl)carbonyl)ethenyl) phenyl] sulfide;
(Benzodioxan-6-yl)[2-trifluoromethyl-4-(E-((3-carboxypyrrolidin-1-yl)carbonyl)ethenyl)
phenyl] sulfide;
(Benzodioxan-6-yl)[2-trifluoromethyl-4-( E-((4-carboethoxypiperidin-1-yl)
carbonyl)ethenyl) phenyl] sulfide;
(Benzodioxan-6-yl)[2-trifluoromethyl-4-( E-((2-carbomethoxy-4-
methoxycarbonylpiperazin-1-yl) carbonyl)ethenyl) phenyl] sulfide;
(Benzodioxan-6-yl)(2-trifluoromethyl-4-(E-((2-carbomethoxypiperazin-1-yl)
carbonyl)ethenyl) phenyl] sulfide;
(Benzodioxan-6-yl)[2-chloro-4-(E-((4-(methylaminocarbonyl)piperazin-1-yl)
carbonyl)ethenyl) phenyl) sulfide;
(2-Methoxyphenyl)-[2,3-dichloro-4(E-[(4-carboxypiperidin-1-yl)carbonyl]ethenyl)
phenyl] sulfide;
(Benzodioxan-6-yl)[2-trifluoromethyl-4-( E-((3-R-carboethoxypiperidin-1-
yl)carbonyl)ethenyl) phenyl] sulfide;
(Benzodioxan-6-yl)[2,3-dichloro-4-(E-((3-(2-oxopyrrolidin-1-yl)prop-1-
ylamino)carbonyl) ethenyl)phenyl]sulfide;
(Benzodioxan-6-yl)[2,3-dichloro-4-( E-((4-acetylpiperazin-1-yl) carbonyl)ethenyl)
phenyl] sulfide;
(Benzodioxan-6-yl)[2,3-dichloro-4-(E-((3-carboethoxypiperidin-1-yl) carbonyl)ethenyl)
phenyl] sulfide;
(Benzodioxan-6-yl)[2,3-dichloro-4-(E-((4-carboethoxypiperidin-1-yl) carbonyl)ethenyl)
phenyl] sulfide;
(Benzodioxan-6-yl)[2,3-dichloro-4-( E-((3-carboxypiperidin-1-yl) carbonyl)ethenyl)
phenyl] sulfide;
(Benzodioxan-6-yl)[2,3-dichloro-4-( E-((4-carboxypiperidin-1-yl) carbonyl)ethenyl)
phenyl] sulfide;
(2-Isopropylphenyl)[2,3-dichloro-4-( E-((4-acetylpiperazi\u00e1-1-yl) carbonyl)ethenyl)
phenyl] sulfide;
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(2\Isopropylphenyl)[2,3-dichloro-4-(E-((3-carboethoxypiperidin-1-yl) carbonyl)ethenyl) phenyl] sulfide;

- (2-Isopropylphenyl)[2,3-dichloro-4-(E-((3-carboxypiperidin-1-yl) carbonyl)ethenyl) phenyl] sulfide;
- (2-Isopropylphenyl)[2,3-dichloro-4-( *E*-((4-carboxypiperidin-1-yl) carbonyl)ethenyl) phenyl] sulfide;
- (2-Methoxyphenyl) [2,3-dichloro-4-(E-((4-(carboxymethylamino)carbonyl-piperidin-1-yl)carbonyl)ethenyl)phenyl] sulfide;
- (2-Methoxyphenyl) [2,3-bis(trifluoromethyl)-4-(E-((4-carboxymethylpiperazin-1-yl) carbonyl)ethenyl)phenyl]sulfide; and
- (2-Methoxyphenyl) [2\3-bis(trifluoromethyl)-4-(E-((4-N-(2-hydroxyethyl)piperazin-1-yl)carbonyl)ethenyl)phenyl]sulfide.
- 14. (Amended) A compound according to Claim 1 where Ar is methoxyphenyl or isopropylphenyl.
- 15. (Amended) A compound according to Claim 1 where Ar is benzodioxan or substituted benzodioxan.
- 16. (Amended) A compound according to Claim 1 where R<sub>3</sub> is a "trans-cinnamide"; and Ar is an unsubstituted aryl, unsubstituted heteroaryl, substituted aryl, or substituted heteroaryl group selected from 1,3-benzimidazol-2-one, 1,4-benzodioxane, 1,3-benzodioxole, 1-benzopyr-2-en-4-one, indole, isatin, phenyl, 1,3-quinazolin-4-one, and quinoline.
- 17. (Amended) A compound according to Claim 1 where  $R_{10}$  and  $R_{11}$  are each independently selected from hydrogen, alkyl, cycloalkyl, alkoxycarbonylalkyl, hydroxyalkyl, and heterocyclylalkyl.
- 18. (Amended) A compound according to Claim 1\where R<sub>10</sub> and R<sub>11</sub> are taken together with N to form an unsubstituted heterocyclyl or substituted heterocyclyl group.

19. A pharmaceutical composition comprising a compound of Claim 1 in a pharmaceutically-acceptable carrier.

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20. (Amended) A method of inhibiting inflammation comprising the administration of a compound of Claim 1 to a mammal in need of treatment for an inflammatory disorder.

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21. (Amended) A method of inhibiting inflammation comprising the administration of a composition of Claim 19 to a mammal in need of treatment for an inflammatory disorder.

22. (Amended) A method of suppressing immune response comprising the administration of a compound of Claim 1 to a mammal in need of treatment for an immune response disorder.

23. (Amended) A method of suppressing immune response comprising the administration of a composition of Claim 19 to a mammal in need of treatment for an immune response disorder.

24. (Amended) A compound of formula II

where R<sub>1</sub> and R<sub>2</sub> are each independently selected from

- a. hydrogen,
- b. halogen,
- c. alkyl,
- d. haloalkyl,

à alkoxy,

f. \ cyano,

g. \ nitro, and

h. carboxaldehyde.

25. (Amended) A process for preparing a compound according to claim 24 comprising

a) reacting a compound of formula II'

$$R_1$$
  $R_2$   $R_2$   $R_1$   $R_2$   $R_3$   $R_4$   $R_2$   $R_2$   $R_3$   $R_4$   $R_5$   $R_5$ 

where  $R_1$  and  $R_2$  are defined as in Claim 24 with lithium hydroxide, and b) cleaving the resulting methyl ether.

26. (Amended) A compound according to Claim 1 with the proviso that when three of  $R_1$ ,  $R_2$ ,  $R_4$ , and  $R_5$  are hydrogen, then the remaining  $R_1$ ,  $R_2$ ,  $R_4$ , or  $R_5$  is not carboxyl, 5-tetrazolyl, hydroxymethyl or carboxyl derivatized in the form of a pharmaceutically acceptable ester.

27. (New) A compound according to Claim 1 where  $R_1$  is haloalkyl;  $R_2$  is haloalkyl;  $R_3$  is "trans-cinnamide";  $R_8$  is hydrogen;  $R_9$  is hydrogen;  $R_{10}$  and  $R_{11}$  are taken together with N to form an unsubstituted or substituted heterocyclyl group;  $R_4$  is hydrogen;  $R_5$  is hydrogen; and Ar is a substituted aryl, substituted with a substituted heterocyclyl.

28. (New) A compound according to Claim 1 where  $R_1$  is trifluoromethyl;  $R_2$  is trifluoromethyl;  $R_3$  is "trans-cinnamide";  $R_8$  is hydrogen;  $R_9$  is hydrogen;  $R_{10}$  and  $R_{11}$  are taken together with N to form an unsubstituted or substituted heterocyclyl group;  $R_4$ 

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is hydrogen; R<sub>5</sub> is hydrogen; and Ar is a substituted phenyl, substituted with a substituted piperidiae.

- 29. (New) A compound according to Claim 1 where R<sub>3</sub> is a "trans-cinnamide."
- 30. (New) A compound according to Claim 1 where  $R_3$  is a "trans-cinnamide" and  $R_8$ , or  $R_9$ , or both  $R_8$  and  $R_9$  are hydrogen.
- 31. (New) A compound according to Claim 1 where  $R_1$ , or  $R_2$ , or both  $R_1$  and  $R_2$  are haloalkyl.
- 32. (New) A compound according to Claim 1 where  $R_1$ , or  $R_2$ , or both  $R_1$  and  $R_2$  are trifluoromethyl.
- 33. (New) A compound according to Claim 1 where Ar is a substituted aryl group.
- 34. (New) A compound according to Claim 1 where Ar is a substituted phenyl group, substituted with a substituted heterocyclyl.
- 35 (New) A compound according to Claim 1 where Ar is a substituted phenyl group, substituted with a substituted piperidine.
- 36. (New) A compound according to Claim 1 where  $R_{10}$  and  $R_{11}$  are taken together with N to form an unsubstituted heterocyclyl or substituted heterocyclyl group selected from an unsubstituted morpholino or a substituted morpholino.
- 37. (New) A substituted diaryl sulfide cinnamide compound, or a pharmaceutically-acceptable salt or prodrug thereof, the compound comprising:

an unsubstituted aryl, unsubstituted heteroaryl, substituted aryl, or substituted heteroaryl group;



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a phenyl group; and

a sulfur atom directly linking the phenyl group and the unsubstituted aryl, unsubstituted heteroaryl, substituted aryl, or substituted heteroaryl group,

where the phenyl group is substituted with i) a cinnamide group placed para- to the linking sulfur atom; and ii) one or more than one substituent other than hydrogen.

38. (New) A compound according to Claim 37 represented by formula III,

$$Ar \xrightarrow{S} \xrightarrow{R_1} \xrightarrow{R_2} \xrightarrow{R_3}$$
III

or a pharmaceutically-acceptable salt or prodrug thereof,

where

Ar is independently selected from unsubstituted aryl, unsubstituted heteroaryl, substituted aryl, or substituted heteroaryl;

R<sub>1</sub>, R<sub>2</sub>, R<sub>4</sub>, and R<sub>5</sub> are each independently selected from hydrogen, halogen, alkyl, haloalkyl, alkoxy, cyano, nitro, carboxaldeyde, and heterocyclylsulfonyl; and R<sub>3</sub> is a cinnamide.

- 39. (New) A compound according to Claim 37 where the phenyl group is substituted with one or more than one haloalkyl group.
- 40. (New) A compound according to Claim 37 comprising a substituted aryl or substituted heteroaryl group where the substituted aryl or the substituted heteroaryl group is substituted with substituted heterocyclyl.
- 41. (New) A compound according to Claim 37 where the nitrogen of the amide of the cinnamide group is a ring atom of an unsubstituted heterocyclyl group.

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(New) A compound according to Claim 37 where the phenyl group is substituted with two haloalkyl groups and the nitrogen of the amide of the cinnamide group is a ring atom of an unsubstituted heterocyclyl or substituted heterocyclyl group.

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- 43. (New) A compound according to Claim 37 comprising a substituted aryl group, where the substituted aryl group is a substituted phenyl group, substituted with a substituted piperidine; the phenyl group is substituted with two trifluoromethyl groups; and the nitrogen of the amide of the cinnamide group is a ring atom of a morpholino group.
- 44. (New) A compound according to Claim 37 which demonstrates inhibitory activity in an ICAM-1/LFA-1 biochemical interaction assay or an ICAM-3/JY-8 cell adhesion assay.
- 45. (New) A compound according to Claim 37 where the compound demonstrates inhibitory activity in an ICAM-1/LFA-1 biochemical interaction assay of about 50 percent at 4  $\mu$ M.
- 46. (New) A compound according to Claim 37 where the compound demonstrates inhibitory activity in an ICAM-3/JY-8 cell adhesion assay of about 100 percent at 0.6  $\mu$ M.
- 47. (New) A pharmaceutical composition comprising a substituted diaryl sulfide cinnamide compound, or a pharmaceutically-acceptable salt or prodrug thereof, and one or more than one pharmaceutically acceptable carriers, the compound comprising:

an unsubstituted aryl, unsubstituted heteroaryl, substituted aryl, or substituted heteroaryl group;

a phenyl group; and

a sulfur atom directly linking the phenyl group and the unsubstituted aryl, unsubstituted heteroaryl, substituted aryl, or substituted heteroaryl group,

where the phenyl group is substituted with i) a cinnamide group placed *para*- to the linking sulfur atom; and ii) one or more than one substituent other than hydrogen.

48. (New) A method of inhibiting inflammation comprising the administration of a substituted diaryl sulfide cinnamide compound, or a pharmaceutically-acceptable salt or prodrug thereof, to a mammal in need of treatment for an inflammatory disorder, the compound comprising:

an unsubstituted aryl, unsubstituted heteroaryl, substituted aryl, or substituted heteroaryl group;

a phenyl group; and

a sulfur atom directly linking the phenyl group and the unsubstituted aryl, unsubstituted heteroaryl, substituted aryl, or substituted heteroaryl group,

where the phenyl group is substituted with i) a cinnamide group placed *para*- to the linking sulfur atom; and ii) one or more than one substituent other than hydrogen.

- 49. (New) A method for the treatment of an inflammatory condition in a subject for which an LFA-1 inhibitor is indicated comprising the administration to the subject of a therapeutically effective amount of a substituted diaryl sulfide cinnamide compound, or a pharmaceutically-acceptable salt or prodrug thereof, where the compound, or pharmaceutically acceptable salt or prodrug thereof, binds to the I-domain of LFA-1 in preference to an ICAM.
- 50. (New) The method of Claim 49 where the diaryl sulfide cinnamide compound comprises:

an unsubstituted aryl, unsubstituted heteroaryl, substituted aryl, or substituted heteroaryl group;

a phenyl group; and

a sulfur atom directly linking the phenyl group and the unsubstituted aryl, unsubstituted heteroaryl, substituted aryl, or substituted heteroaryl group,

where the phenyl group is substituted with i) a cinnamide group placed *para*- to the linking sulfur atom; and ii) one or more than one substituent other than hydrogen..

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51. (New) The method of Claim 50 where the substituted diaryl sulfide cinnamide comprises a compound of formula III:

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 $Ar \xrightarrow{S} \xrightarrow{R_1} \xrightarrow{R_2} \xrightarrow{R_3}$  III

or a pharmaceutically-acceptable salt or prodrug thereof,

where

Ar is independently selected from unsubstituted aryl, unsubstituted heteroaryl, substituted aryl, or substituted heteroaryl;

R<sub>1</sub>, R<sub>2</sub>, R<sub>4</sub>, and R<sub>5</sub> are independently selected from hydrogen, halogen, alkyl, haloalkyl, alkoxy, cyano, nitro, carboxaldeyde, and heterocyclylsulfanyl; and R<sub>3</sub> is a cinnamide.

- 52. (New) A compound which
  - (1) binds to the interaction-domain of LFA-1; and
  - (2) is
  - (a) a diaryl sulfide comprising first and second aryl groups and a sulfur atom which links the first and second aryl groups and which is connected directly to (i) an aromatic ring in the first aryl group and (ii) an aromatic ring in the second aryl group, where
    - (A) the first aryl group is substituted with a cinnamide moiety placed ortho- to the linking sulfur atom; or
    - (B) the first aryl group is substituted with a cinnamide moiety placed para- to the linking sulfur atom and the second aryl group is substituted;

or

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(b) a pharmaceutically acceptable salt or prodrug of said diaryl sulfide.

- 53. (New) A compound according to Claim 52 where the amide group of the cinnamide moiety is a secondary or tertiary amide.
- 54. (New) A compound according to Claim 53 where the amide group of the cinnamide molety is a tertiary amide in which the nitrogen atom of the amide group is part of a heterocyclic ring.
- 55. (New) A compound according to Claim 52 where the first aryl group comprises one or more substituents in addition to the cinnamide moiety placed ortho-or para- to the linking sulfur atom.
- 56. (New) A compound according to Claim 52 where the second aryl group comprises one or more substituents.
- 57. (New) A compound according to Claim 52 where the first aryl group comprises a phenyl group which is substituted in the para--position by a cinnamide group and which optionally comprises one or more other substituents.
- 58. (New) A compound according to Claim 52 wherein the second aryl group comprises a phenyl group which comprises one or more substituents.
- 59. (New) A compound according to Claim 52 where each of the first and second aryl groups comprises a phenyl group.
- 60. (New) A compound according to Claim 52 where the first aryl group is a phenyl group substituted with the cinnamide moiety and optionally further substituted with at least one group which is an alkyl, halogen, hydroxy, or alkoxy group, and the second aryl group optionally is substituted with at least one group which is an alkyl, halogen, hydroxy, or alkoxy group.

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